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GTP - 32

CONTROL PROCESSOR

User Manual

REV 2 UNITS

TABLE OF CONTENTS

INSTALLATION 4
CONFIGURATION 5
IP ADDRESS SETUP 5
SUBNET MASK SETUP 5
GATEWAY ADDRESS SETUP 5
ETHERNET LINK SPEED SETUP 6
SETUP 6
SET PASSWORD 7
SET SYSTEM LABEL 8
SET SYSTEM TIME 10
GPI 11
GPO 14
SERIAL/ETHERNET CHANNEL SETUP 16
Serial/Ethernet Protocol Assignment 16
Serial/Ethernet Device Configuration 17
Serial Physical Configuration 18
Ethernet Physical Configuration 19
EVENT NOTIFICATION 19
EVENT DEFINITIONS 20
USP EVENTS 20
REMOTE EVENT DEFINITIONS 22
COMBINATORIAL EVENTS 24
ACTION DEFINITIONS 30
TIME ACTIONS 30
GROUP ACTIONS 32
EVENT MONITORING 34
BACKUP AND RESTORE TABLES 38
EVENT LOGGING 40
SPECIFICATIONS 43
FRONT & REAR VIEWS 47
CONFIGURE GPIS FOR DRY/WET OPERATION 48
CONFIGURE GPOS FOR DRY/WET OPERATION 50
LIMITED WARRANTY 51

REVISION HISTORY

2.0	First Draft of combined Installation and Setup Manual
2.1	Protocol Assignment Table Setup added.

INSTALLATION

CAUTION
Do NOT apply AC voltage to power supply, then connect power supply to GTP-32. Component damage may occur.

1) Wire external GPI and external GPO connections to supplied D37 male connectors, per the GPIO connector wiring diagram in SPECIFICATIONS section.

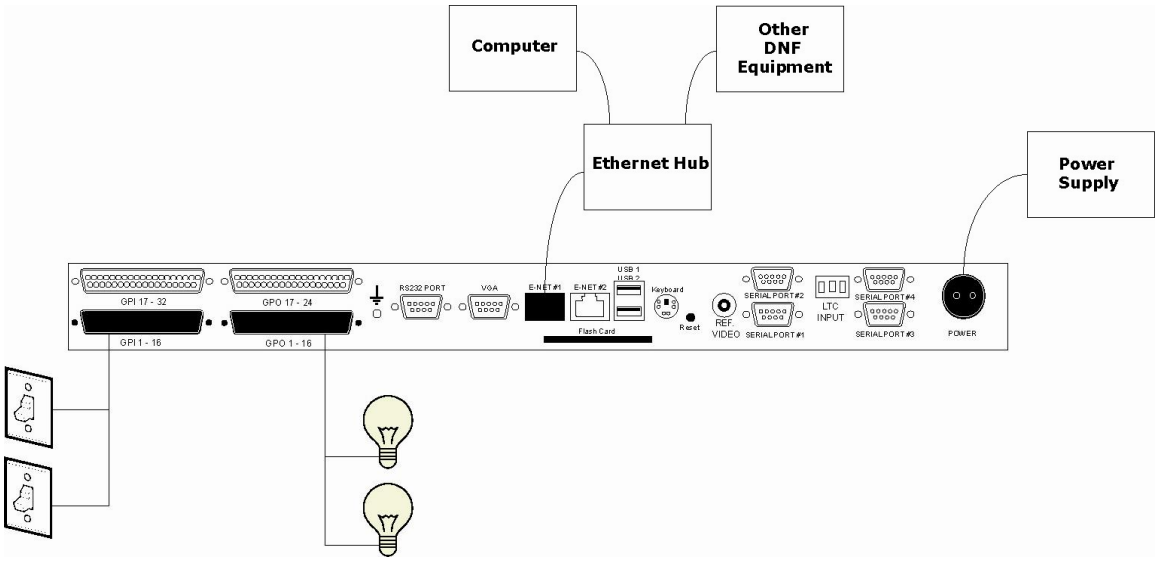
2) Connect wired D37 connectors from step 1 to GTP-32 connector labeled "GPI 1-16", "GPI 17-32", "GPO 1-16", or "GPO 17-32".

3) Connect Cat 5 cable to GTP-32 connector labeled "E-NET #1". Connect other end of Cat 5 cable to customer supplied ethernet hub.

4) Connect power supply's round locking female connector to GTP-32 connector labeled "POWER".

5) Connect female side of power cable to supplied power supply.

6) Connect male side of power cable to AC voltage, 100 – 240.



7) Push GTP-32 power switch, located on front panel, to ON position. "O" on power switch is OFF position.

8) Front panel LEDs will flash during power up. When power up and system initialization completes, the front panel LEDs will turn off and the front panel display will show Model Number and Software Version. Allow 25 seconds for power up and system initialization to complete.

No connection is required for the REF VIDEO, DIAGNOSTIC, or VGA connectors on the rear of the GTP-32. LTC and Serial Port connectors may be required depending on Protocols and Options.

CONFIGURATION

Configuration is required after initial installation.

IP ADDRESS SETUP

1) On GTP-32 front panel, use ↑↓ keys to select "Current IP".
2) Press ENTER key. Display will show current IP address with cursor in far left column.
3) Use ↑↓ keys to change number.

   Use ← → keys to move cursor position.
4) Press ENTER to save new IP address, or press ESC to exit without saving.

NOTE- New IP Address will take effect on next power up.

SUBNET MASK SETUP

1) On GTP-32 front panel, use ↑↓ keys to select "Current Mask".
2) Press ENTER key. Display will show current Subnet Mask with cursor in far left column.
3) Use ↑↓ keys to change number.

   Use ← → keys to move cursor position.
4) Press ENTER to save new Subnet Mask, or press ESC to exit without saving.

NOTE- New Subnet Mask will take effect on next power up.

GATEWAY ADDRESS SETUP

1) On GTP-32 front panel, use ↑↓ keys to select "Current Gateway".
2) Press ENTER key. Display will show current Gateway address with cursor in far left column.
3) Use ↑↓ keys to change number.

   Use ← → keys to move cursor position.
4) Press ENTER to save new Gateway address, or press ESC to exit without saving.

NOTE- New Gateway Address will take effect on next power up.

ETHERNET LINK SPEED SETUP

1) On GTP-32 front panel, use ↑↓ keys to select "Ethernet Status".

2) Press ENTER key. Display will show current speed selection.

3) Use ↑↓ keys to change selection.

   Select AUTO to use highest available speed.

   Select 10Mbs for long ethernet cable runs.

4) Press ENTER to save new Ethernet link speed, or press ESC to exit without saving.

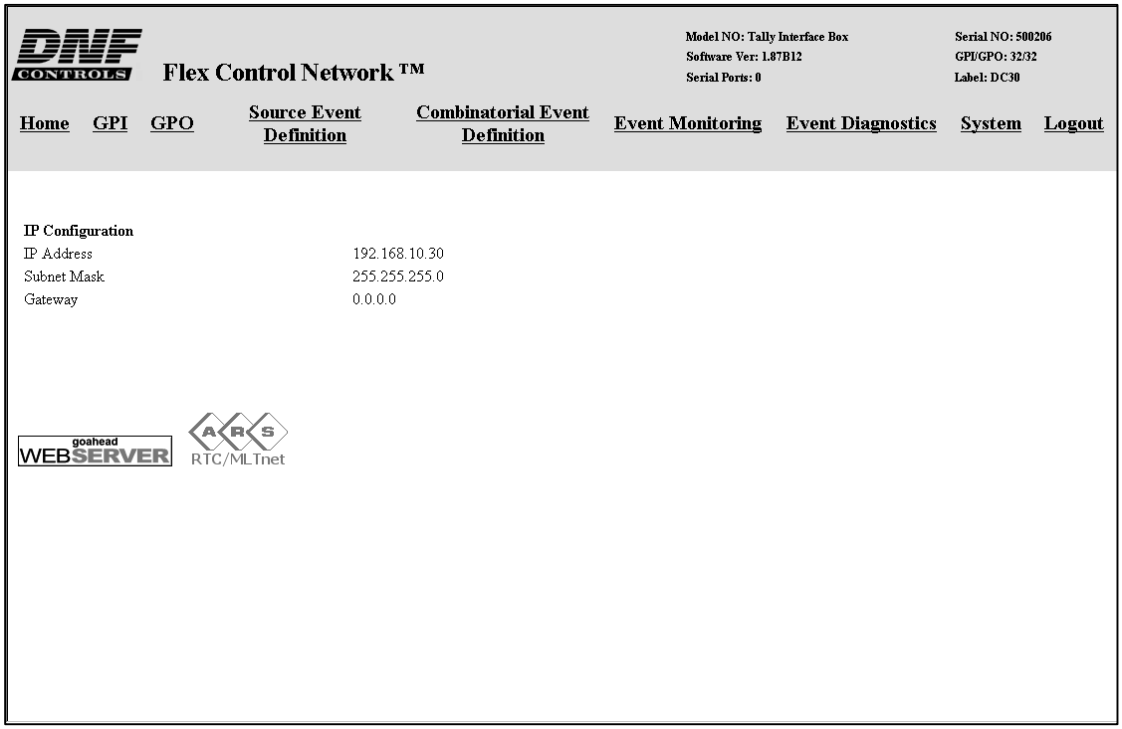
NOTE- New ethernet speed selection will take effect immediately.

SETUP

Setup is required after initial installation. Setup may also be required after changing external GPIs or GPOs.

Setup is performed using a computer running an off the shelf web browser such as Internet Explorer or Firefox. Connect the CAT5 cable from the computer to the same ethernet switch that the GTP-32 is connected to.

After launching the web browser, enter the IP address of the GTP-32 to be setup. The GTP-32 Home Page will be displayed.

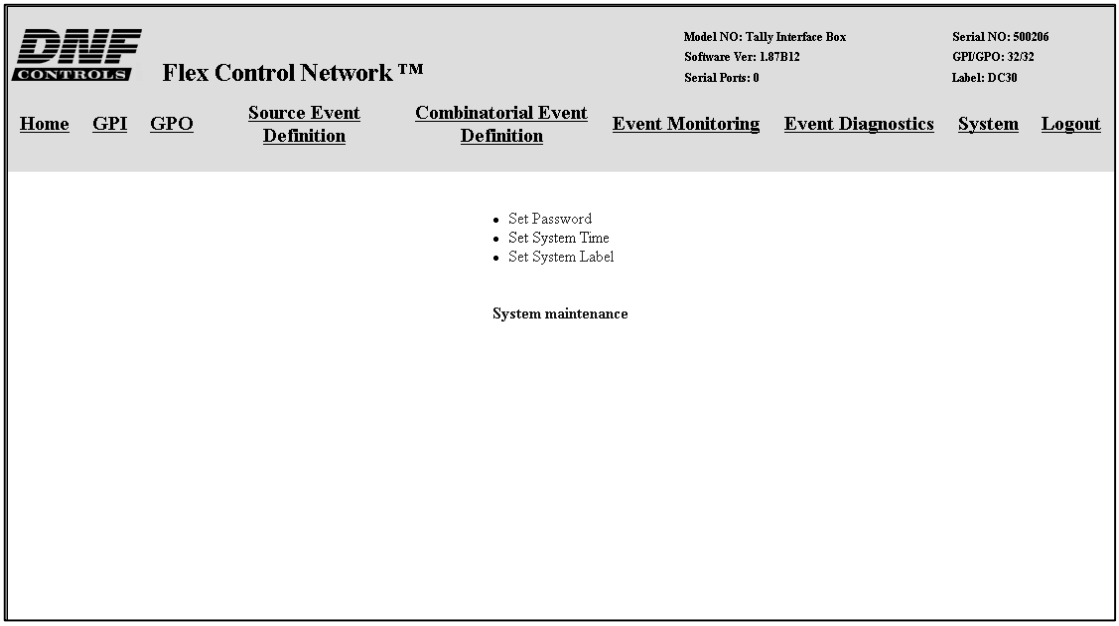


SET PASSWORD

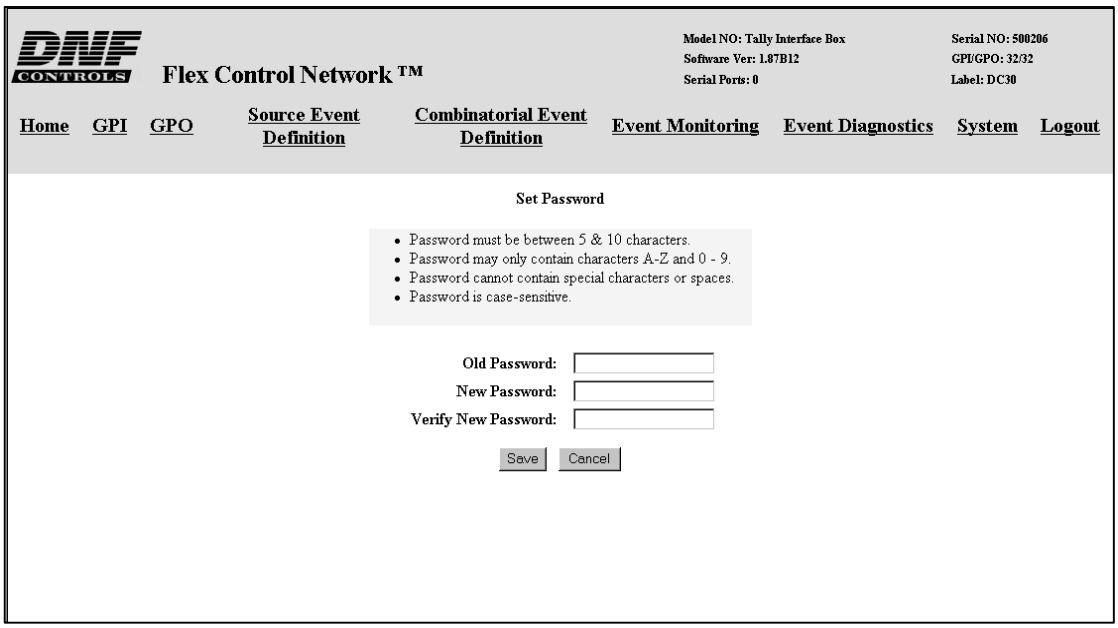
The default password, when shipped from the factory, is "controls", all lower case. The password is used to access all configuration screens.

Using the web browser:

1) From the GTP-32 Home Page, click on the "System" link. The System page will be displayed.



2) Click on "Set Password". The Set Password page will be displayed.



3) In the "Old password" entry box, enter the current password.

Note: When shipped from the factory, the default password is "controls", all lower case.

4) Enter the new password in the "New Password" entry box.

5) Enter the new password in the "Verify New Password" entry box.

6) Click on "Save" to save the new password, or click on "Cancel" to exit without changing passwords.

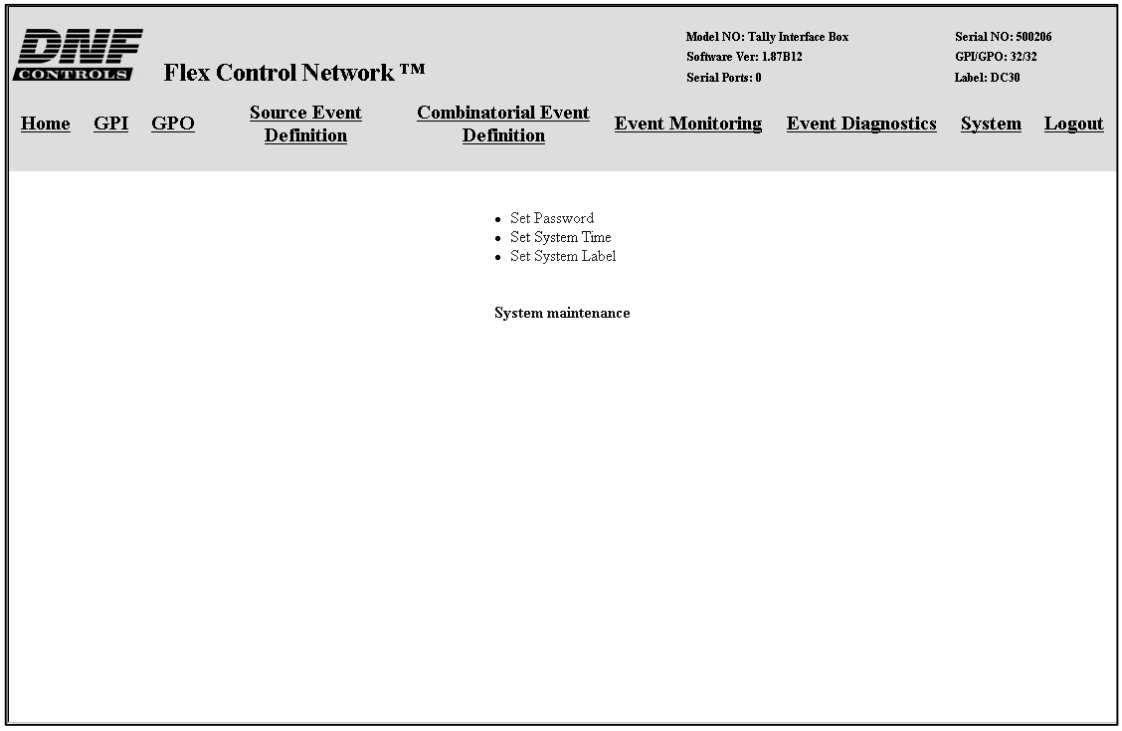
Note: If the "New Password" entry and the "Verify New Password" entry do not match, an error will be displayed.

SET SYSTEM LABEL

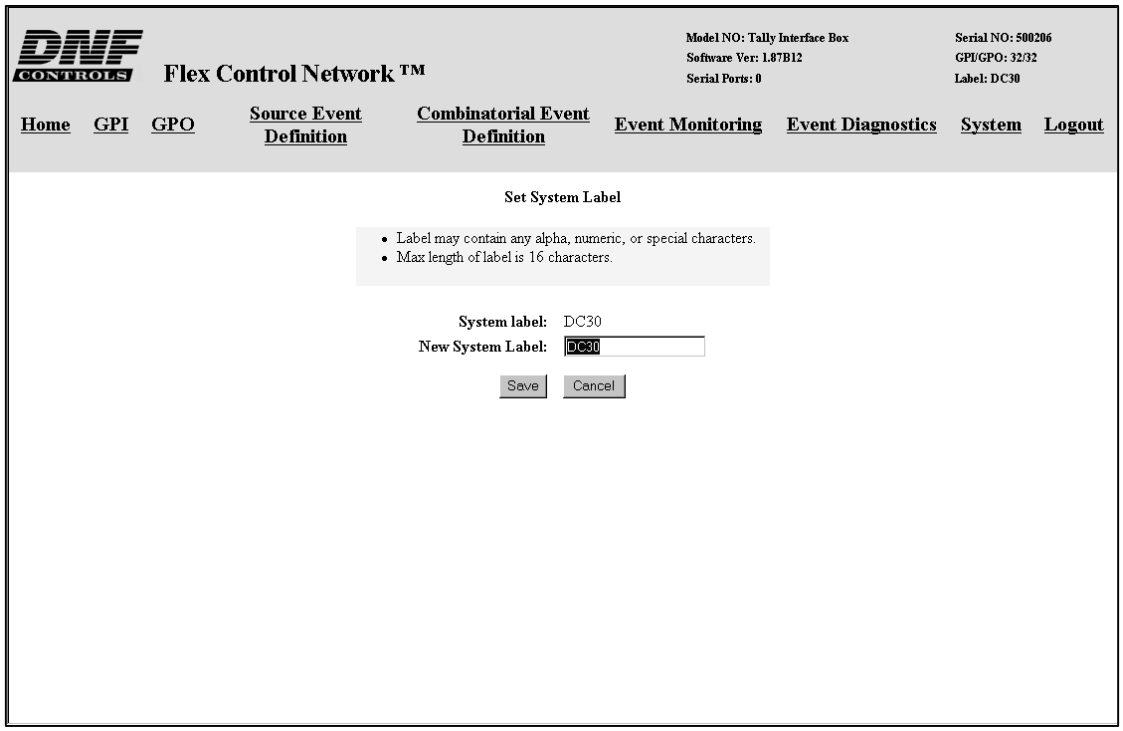
The System Label is used to uniquely identify a GTP-32. This name is associated with the IP address.

Using the web browser:

1) From the GTP-32 Home Page, click on the "System" link. The System page will be displayed.



2) Click on "Set System Label". The Set System Label page will be displayed.



3) Enter any name made up of letters, numbers, or special characters, up to 16 characters.

4) Click on "Save" to save the name entered in step 3).
   OR
   Click on "Cancel" to exiting without changing the System Label.

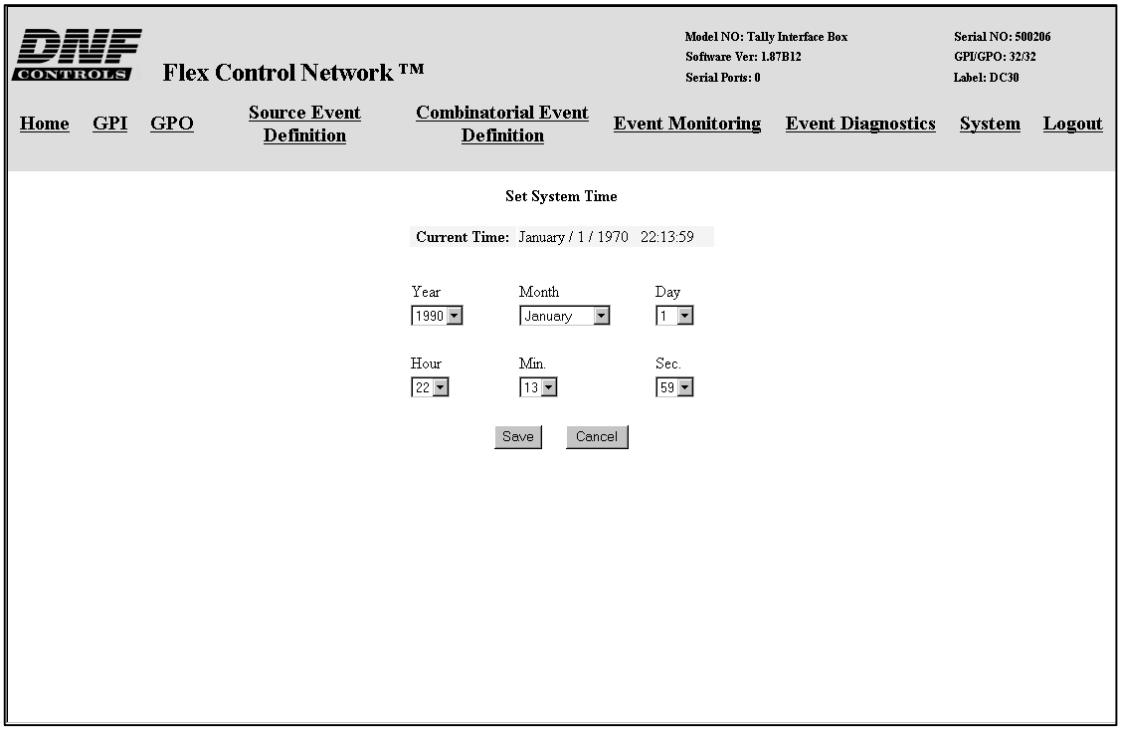
SET SYSTEM TIME

The system time is only used for error logging. It is not used to process GPIs or control GPOs.

Using the web browser:

1) From the GTP-32 Home Page, click on the "System" link. The System page will be displayed.

2) Click on "Set System Time". The Set System Time page will be displayed.



3) Using the drop down menus, set the current date and time.

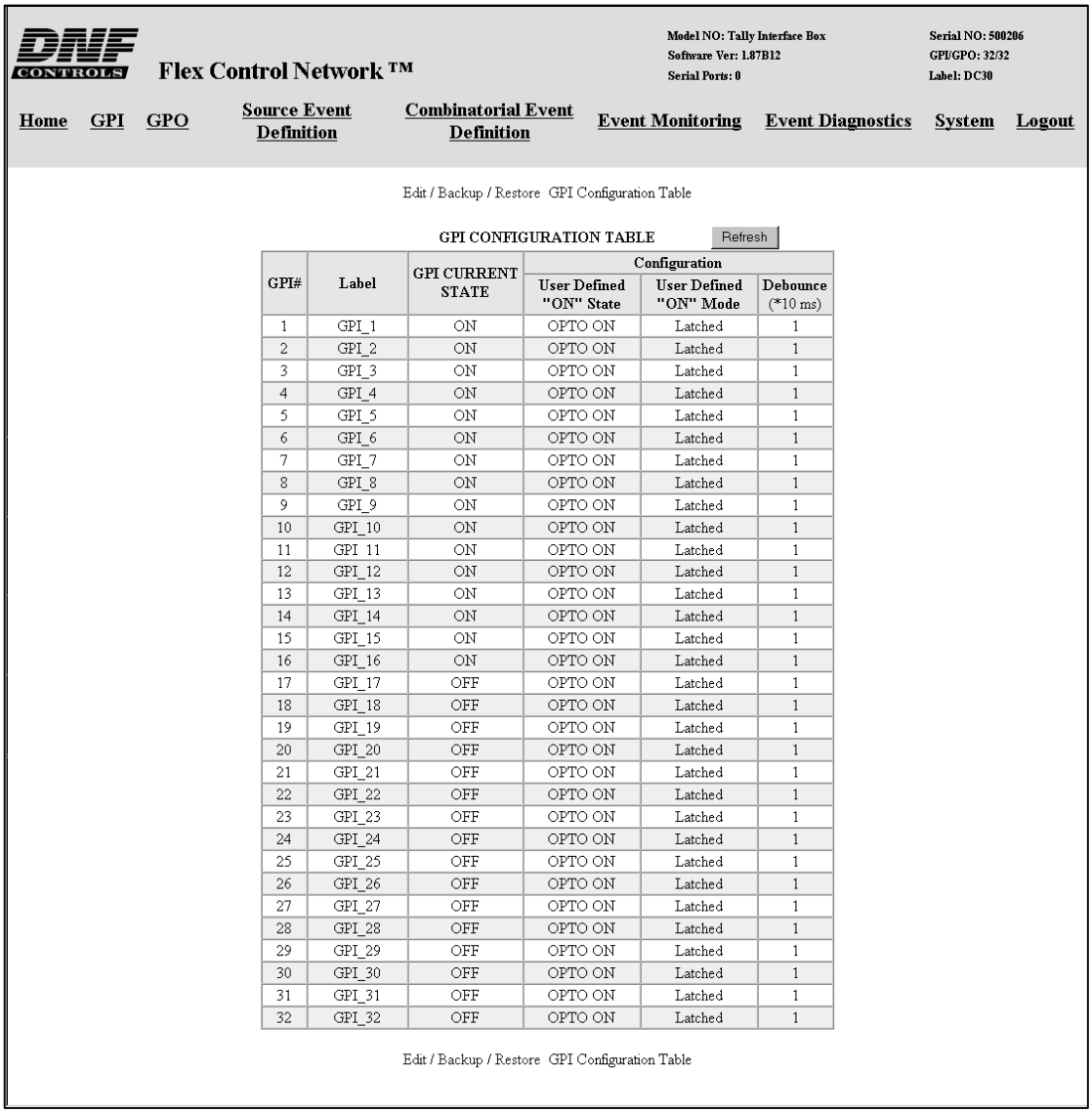
4) Click on "Save" to save the entered date and time.
   OR
   Click on "Cancel" to exit without saving.

GPI

The GPI Section is responsible for providing isolation between the various GPI sources and the GPO devices, as well as detecting active GPIs. Each GPI input is isolated using an opto-isolator that requires a differential voltage across it to turn it on. This input supports positive and negative voltages, active high GPI sources, and active low GPI sources. GPIs may be used as Source Events in Combinatorial Event Definitions and in the Event Monitoring Table.

GPI SETUP

1) From the GTP-32 Home Page, click on the "GPI" link. The GPI Configuration Table page will be displayed.



DNF CONTROLS Flex Control Network ™

Model NO: Tally Interface Box
Software Ver: 1.87B12
Serial Ports: 0

Serial NO: 500206
GPI/GPO: 32/32
Label: DC30

Home GPI GPO Source Event Definition Combinatorial Event Definition Event Monitoring Event Diagnostics System Logout

Edit / Backup / Restore GPI Configuration Table

GPI CONFIGURATION TABLE Refresh

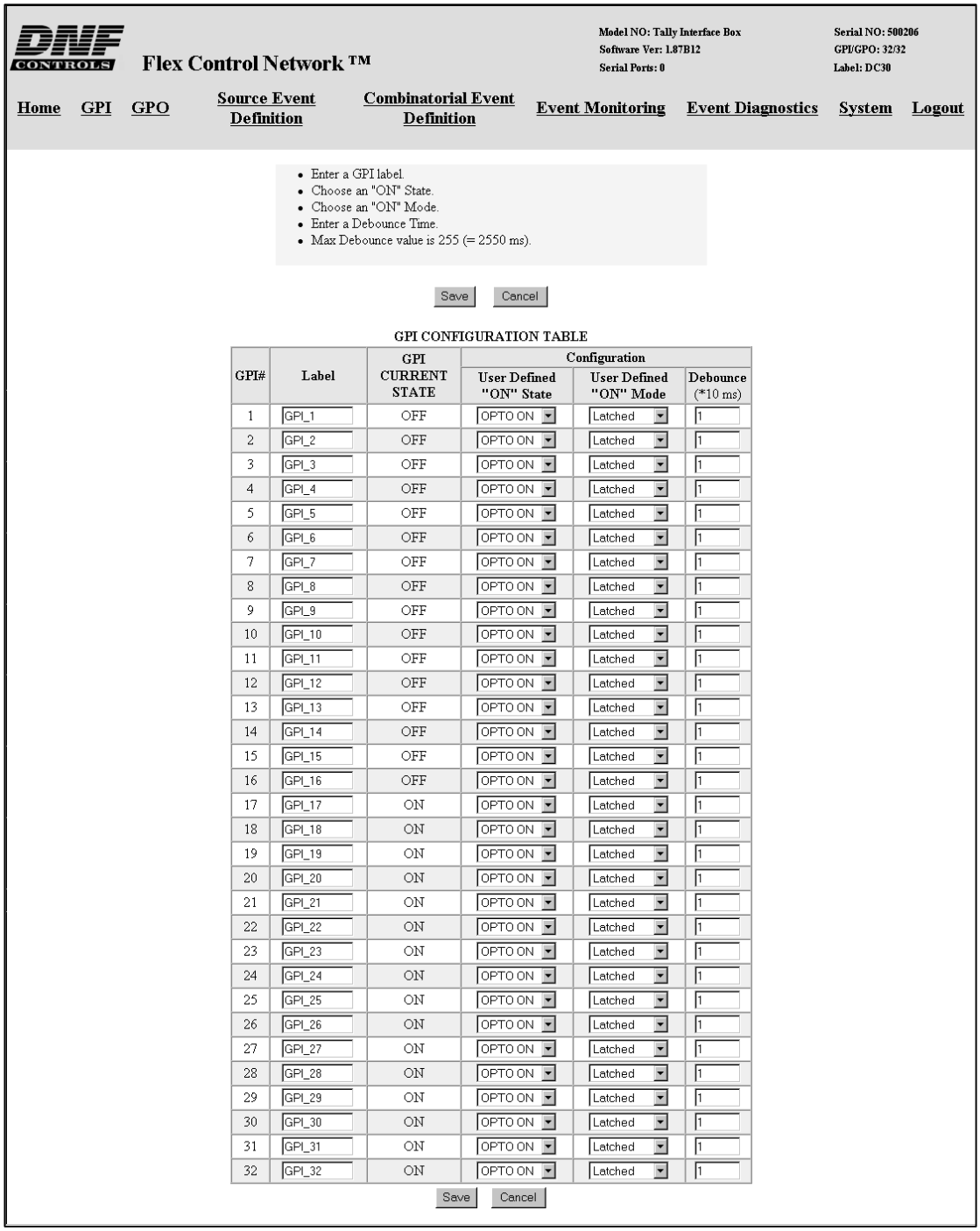
GPI#	Label	GPI CURRENT STATE	Configuration		
			User Defined "ON" State	User Defined "ON" Mode	Debounce (*10 ms)
1	GPI_1	ON	OPTO ON	Latched	1
2	GPI_2	ON	OPTO ON	Latched	1
3	GPI_3	ON	OPTO ON	Latched	1
4	GPI_4	ON	OPTO ON	Latched	1
5	GPI_5	ON	OPTO ON	Latched	1
6	GPI_6	ON	OPTO ON	Latched	1
7	GPI_7	ON	OPTO ON	Latched	1
8	GPI_8	ON	OPTO ON	Latched	1
9	GPI_9	ON	OPTO ON	Latched	1
10	GPI_10	ON	OPTO ON	Latched	1
11	GPI_11	ON	OPTO ON	Latched	1
12	GPI_12	ON	OPTO ON	Latched	1
13	GPI_13	ON	OPTO ON	Latched	1
14	GPI_14	ON	OPTO ON	Latched	1
15	GPI_15	ON	OPTO ON	Latched	1
16	GPI_16	ON	OPTO ON	Latched	1
17	GPI_17	OFF	OPTO ON	Latched	1
18	GPI_18	OFF	OPTO ON	Latched	1
19	GPI_19	OFF	OPTO ON	Latched	1
20	GPI_20	OFF	OPTO ON	Latched	1
21	GPI_21	OFF	OPTO ON	Latched	1
22	GPI_22	OFF	OPTO ON	Latched	1
23	GPI_23	OFF	OPTO ON	Latched	1
24	GPI_24	OFF	OPTO ON	Latched	1
25	GPI_25	OFF	OPTO ON	Latched	1
26	GPI_26	OFF	OPTO ON	Latched	1
27	GPI_27	OFF	OPTO ON	Latched	1
28	GPI_28	OFF	OPTO ON	Latched	1
29	GPI_29	OFF	OPTO ON	Latched	1
30	GPI_30	OFF	OPTO ON	Latched	1
31	GPI_31	OFF	OPTO ON	Latched	1
32	GPI_32	OFF	OPTO ON	Latched	1

Edit / Backup / Restore GPI Configuration Table

2) At the top or bottom of the page, click on the "Edit GPI Configuration Table" link.

If prompted for password, enter your password then click on "Login" to log in to the GTP-32. If already logged in, the password prompt will not be displayed.

The GPI Configuration Table will be displayed with drop down boxes.


DNF CONTROLS
Flex Control Network ™
Model NO: Tally Interface Box
Software Ver: 1.87B12
Serial Ports: 0
Serial NO: 500206
GPI/GPO: 32/32
Label: DC30
Home GPI GPO Source Event Definition Combinatorial Event Definition Event Monitoring Event Diagnostics System Logout
Enter a GPI label.
Choose an "ON" State.
Choose an "ON" Mode.
Enter a Debounce Time.
Max Debounce value is 255 (= 2550 ms).
Save Cancel
GPI CONFIGURATION TABLE
GPI# Label GPI CURRENT STATE Configuration User Defined "ON" State User Defined "ON" Mode Debounce (*10 ms)
1 GPI_1 OFF OPTO ON Latched 1
2 GPI_2 OFF OPTO ON Latched 1
3 GPI_3 OFF OPTO ON Latched 1
4 GPI_4 OFF OPTO ON Latched 1
5 GPI_5 OFF OPTO ON Latched 1
6 GPI_6 OFF OPTO ON Latched 1
7 GPI_7 OFF OPTO ON Latched 1
8 GPI_8 OFF OPTO ON Latched 1
9 GPI_9 OFF OPTO ON Latched 1
10 GPI_10 OFF OPTO ON Latched 1
11 GPI_11 OFF OPTO ON Latched 1
12 GPI_12 OFF OPTO ON Latched 1
13 GPI_13 OFF OPTO ON Latched 1
14 GPI_14 OFF OPTO ON Latched 1
15 GPI_15 OFF OPTO ON Latched 1
16 GPI_16 OFF OPTO ON Latched 1
17 GPI_17 ON OPTO ON Latched 1
18 GPI_18 ON OPTO ON Latched 1
19 GPI_19 ON OPTO ON Latched 1
20 GPI_20 ON OPTO ON Latched 1
21 GPI_21 ON OPTO ON Latched 1
22 GPI_22 ON OPTO ON Latched 1
23 GPI_23 ON OPTO ON Latched 1
24 GPI_24 ON OPTO ON Latched 1
25 GPI_25 ON OPTO ON Latched 1
26 GPI_26 ON OPTO ON Latched 1
27 GPI_27 ON OPTO ON Latched 1
28 GPI_28 ON OPTO ON Latched 1
29 GPI_29 ON OPTO ON Latched 1
30 GPI_30 ON OPTO ON Latched 1
31 GPI_31 ON OPTO ON Latched 1
32 GPI_32 ON OPTO ON Latched 1
Save Cancel

3) For each GPI, do the following:

Note: It is only necessary to change these settings to achieve specific functions. Under normal use these will remain at their default settings.

Enter a label name to help identify the GPI with a source function.

Set the "User Define ON State". Click on the drop down arrow.

Select OPTO ON if the GPI is considered "ON" when power (+V or –V) is applied across the GTP-32's opto-isolator 2-wire input.

Select OPTO OFF if the GPI is considered on when no power is applied across the GTP-32's opto-isolator 2-wire input.

Set the "User Defined ON Mode". Click on the drop down arrow.

Select LATCHED if the GPI source signal turns on and stays on when activated. The GPI source signal turns off and stays off when de-activated (GPI follows the source signal). This is the recommended setting.

Select MOMENTARY if the GPI source signal turns on for a specific duration then automatically turns off, when activated.

If MOMENTARY is selected, enter a "Debounce" time in the DEBOUNCE box. If LATCH was selected, debounce time is ignored.

The debounce time is used to filter out unwanted GPI signals. If the debounce time is greater than that GPI's on time, then the GPI will be ignored. If the debounce time is less that the GPI on time, then the GPI will be detected.

Set the debounce time to the minimum on time of the GPI to be detected.

All debounce time entries are automatically multiplied by 10milliseconds. The minimum entry is "1", for 10 milliseconds. The maximum entry is "255" for 2550 milliseconds. All entries greater than "255" will be set to "255".

4) After entering GPI configuration data, click on SAVE to save the entered configuration data or click on CANCEL to exit without saving.

GPO

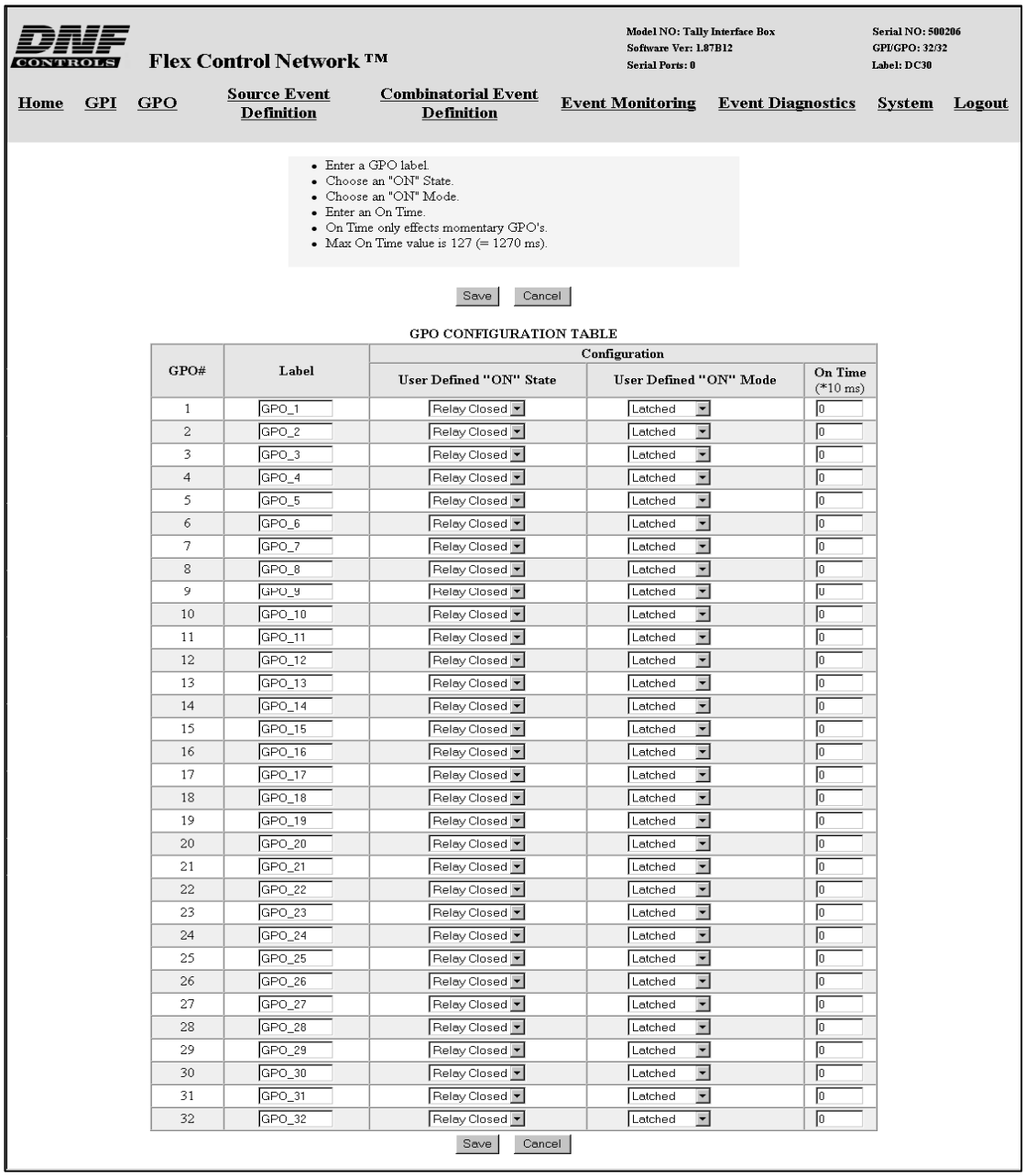
The GPO section is made up of relay contact closures, providing isolation between the GPI sources and the various GPO controlled devices. Each GPO output is a normally open, relay contact pair. GPOs may be used as Actions in the Event Monitoring Table.

GPO SETUP

From the GTP-32 Home Page, click on the "GPO" link. The GPO Configuration Table page will be displayed.

1) At the top or bottom of the page, click on the "Edit GPO…. Configuration Table" link.

   If prompted for password, enter your password then click on "Login" to log in to the GTP-32. If already logged in, the password prompt will not be displayed.


DNF CONTROLS
Flex Control Network ™
Model NO: Tally Interface Box
Software Ver: 1.87B12
Serial Ports: 0
Serial NO: 500206
GPI/GPO: 32/32
Label: DC30
Home GPI GPO Source Event Definition Combinatorial Event Definition Event Monitoring Event Diagnostics System Logout
Enter a GPO label.
Choose an "ON" State.
Choose an "ON" Mode.
Enter an On Time.
On Time only effects momentary GPO's.
Max On Time value is 127 (= 1270 ms).
Save Cancel
GPO CONFIGURATION TABLE
GPO# Label Configuration User Defined "ON" State User Defined "ON" Mode On Time (*10 ms)
1 GPO_1 Relay Closed Latched 0
2 GPO_2 Relay Closed Latched 0
3 GPO_3 Relay Closed Latched 0
4 GPO_4 Relay Closed Latched 0
5 GPO_5 Relay Closed Latched 0
6 GPO_6 Relay Closed Latched 0
7 GPO_7 Relay Closed Latched 0
8 GPO_8 Relay Closed Latched 0
9 GPO_9 Relay Closed Latched 0
10 GPO_10 Relay Closed Latched 0
11 GPO_11 Relay Closed Latched 0
12 GPO_12 Relay Closed Latched 0
13 GPO_13 Relay Closed Latched 0
14 GPO_14 Relay Closed Latched 0
15 GPO_15 Relay Closed Latched 0
16 GPO_16 Relay Closed Latched 0
17 GPO_17 Relay Closed Latched 0
18 GPO_18 Relay Closed Latched 0
19 GPO_19 Relay Closed Latched 0
20 GPO_20 Relay Closed Latched 0
21 GPO_21 Relay Closed Latched 0
22 GPO_22 Relay Closed Latched 0
23 GPO_23 Relay Closed Latched 0
24 GPO_24 Relay Closed Latched 0
25 GPO_25 Relay Closed Latched 0
26 GPO_26 Relay Closed Latched 0
27 GPO_27 Relay Closed Latched 0
28 GPO_28 Relay Closed Latched 0
29 GPO_29 Relay Closed Latched 0
30 GPO_30 Relay Closed Latched 0
31 GPO_31 Relay Closed Latched 0
32 GPO_32 Relay Closed Latched 0
Save Cancel

The GPO Configuration Table will be displayed with drop down boxes.

2) For each GPO, do the following:

Note: It is only necessary to change these settings to achieve specific functions. Under normal use these will remain at their default settings.

Enter a label name to help identify the GPO with an output function.

Set the "User Defined ON State". Click on the drop down arrow.

Select "RELAY CLOSED" if the GPO is considered "ON" when the relay contacts are closed. In this mode the relay will pass a signal or ground from the COM contact to the NORMALLY OPEN contact.

Select "RELAY OPEN" if the GPO is considered "ON" when the relay contacts are open. In this mode the relay will NOT pass any signal voltage or ground from the COM contact to the NORMALLY OPEN contact.

Set the "User Defined ON Mode".

Select LATCHED if the GPO should stay ON or OFF until told to change states (GPO follows the assigned source event).

Select MOMENTARY if the GPO should turn ON for a finite period of time then automatically turn OFF without being told to turn OFF.

If MOMENTARY is selected in step 0 above, enter an ON TIME. The GPO will turn on for the ON TIME, then automatically turn OFF.

All ON TIME entries are automatically multiplied by 10 milliseconds. The minimum entry is "1", for 10 milliseconds. The maximum entry is "255" for 2550 milliseconds. All entries greater than "255" will be set to "255".

3) After entering GPO configuration data, click on SAVE to save the entered configuration data or click on CANCEL to exit without saving.

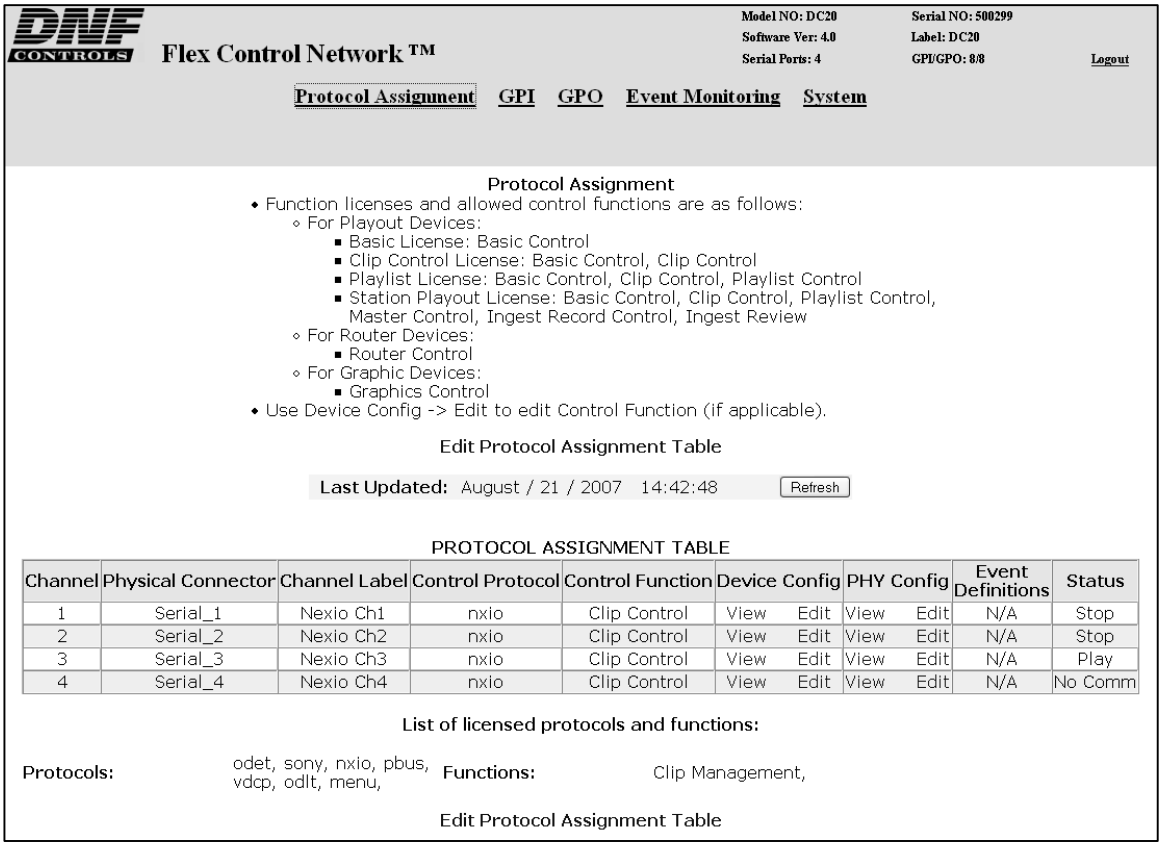
SERIAL/ETHERNET CHANNEL SETUP

Serial Channel Setup is required after initial installation. This step may be performed at any other time, as required.

Serial Channel Setup is performed using a computer running an off-the-shelf web browser such as ñMicrosoft Internet Explorerò or ñFirefoxò. Connect the CAT5 cable from the computer to the same Ethernet hub that the GTP-32 is connected to.

a. After launching the web browser, enter the IP address of the GTP-32 to be setup. The GTP-32 Home Page will be displayed.

b. Click on the ñProtocol Assignmentò link at the top of the page. The Protocol Assignment Table will be displayed.



DNF CONTROLS

Flex Control Network ™

Model NO: DC20 Serial NO: 500299
Software Ver: 4.0 Label: DC20
Serial Ports: 4 GPI/GPO: 8/8 Logout

Protocol Assignment | GPI | GPO | Event Monitoring | System

Protocol Assignment

- Function licenses and allowed control functions are as follows:
  - For Playout Devices:
    - Basic License: Basic Control
    - Clip Control License: Basic Control, Clip Control
    - Playlist License: Basic Control, Clip Control, Playlist Control
    - Station Playout License: Basic Control, Clip Control, Playlist Control, Master Control, Ingest Record Control, Ingest Review
  - For Router Devices:
    - Router Control
  - For Graphic Devices:
    - Graphics Control
- Use Device Config -> Edit to edit Control Function (if applicable).

Edit Protocol Assignment Table

Last Updated: August / 21 / 2007 14:42:48 [Refresh]

PROTOCOL ASSIGNMENT TABLE

Channel	Physical Connector	Channel Label	Control Protocol	Control Function	Device Config		PHY Config		Event Definitions	Status
1	Serial_1	Nexio Ch1	nxio	Clip Control	View	Edit	View	Edit	N/A	Stop
2	Serial_2	Nexio Ch2	nxio	Clip Control	View	Edit	View	Edit	N/A	Stop
3	Serial_3	Nexio Ch3	nxio	Clip Control	View	Edit	View	Edit	N/A	Play
4	Serial_4	Nexio Ch4	nxio	Clip Control	View	Edit	View	Edit	N/A	No Comm

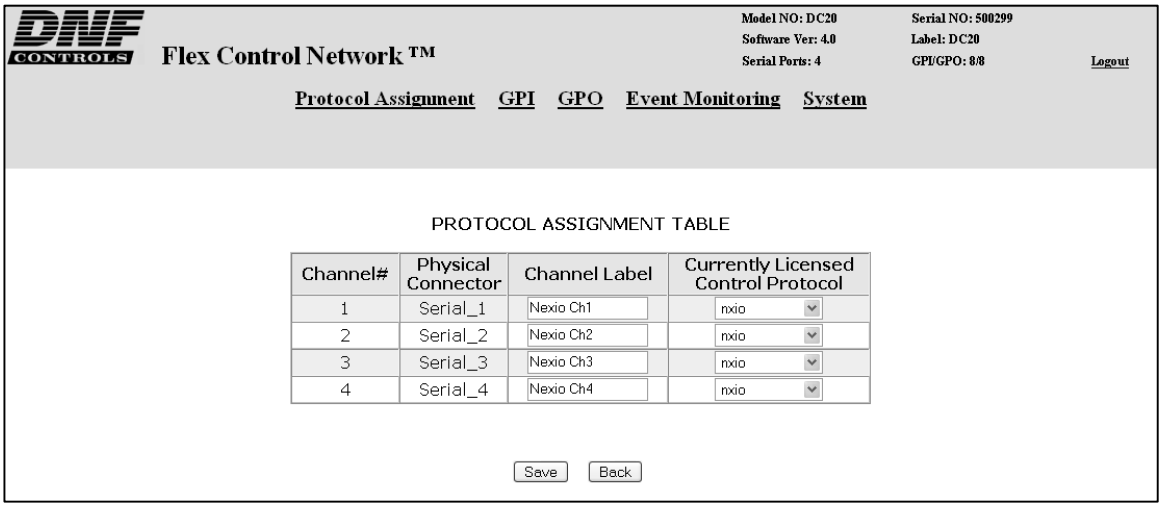
List of licensed protocols and functions:

Protocols: odet, sony, nxio, pbus, vdcp, odlt, menu, Functions: Clip Management,

Edit Protocol Assignment Table

Serial/Ethernet Protocol Assignment

2) Click on "Edit Protocol Assignment Table". An editable version of the table will be displayed.



3) For each channel, enter a channel identifier (up to 20 characters) in the "Channel Label" box.

4) For each channel, select from the Licensed Control Protocol drop down menu.

5) Click on "SAVE" to save the entered values

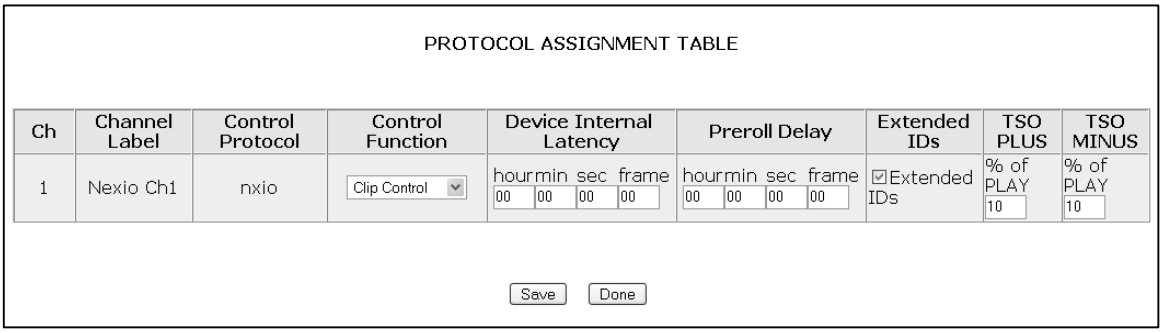
OR

Click on "BACK" to exit without saving entered values.

Serial/Ethernet Device Configuration

1) Click on the "Protocol Assignment" link at the top of the page. The Protocol Assignment Table will be displayed.

2) Click on "Edit" field under the "Device Configuration". An edit widow will be displayed.



3) Click on drop down arrow field under the "Control Functions" field and chose the control functionality (depending on licensed protocols).

4) Enter the "Device Latency" (the amount of time the server takes to react to commands, typically 1 to 2 seconds).

5) VDCP protocol requires that a channel number be assigned. This is the channel number assigned by the server.

6) Check the "Extended IDs" box if the server allows greater than 8 character clip names.

7) Enter the "TSO" (tape speed override) value, 25% Maximum.

8) Click on "SAVE" to save the entered values

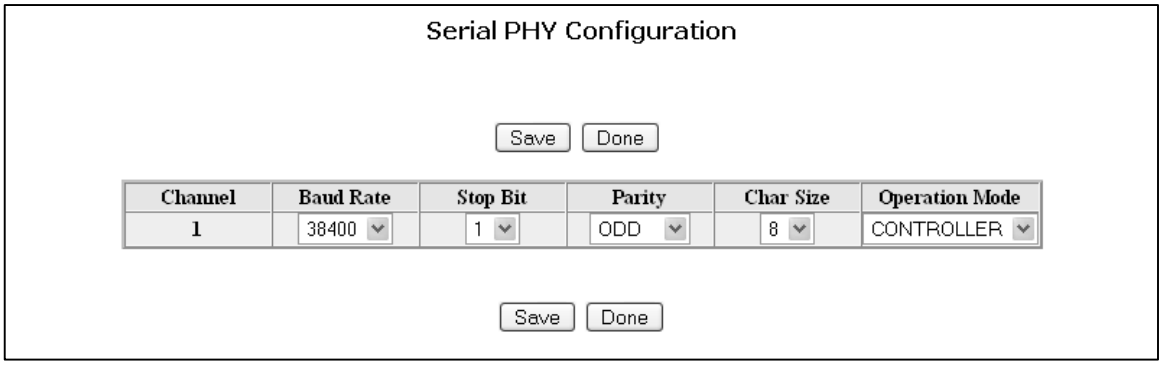
OR

Click on "BACK" to exit without saving entered values.

Serial Physical Configuration

1) Click on the "Protocol Assignment" link at the top of the page. The Protocol Assignment Table will be displayed.

2) Click on "Edit" field under the "PHY Configuration". An edit widow will be displayed.



3) Click on drop down arrow field under the "Baud Rate" field and chose the Baud rate for the communications protocol of the device which is connected to the GTP-32 (typically "38400" for all protocols; Sony, Odet, VDCP, NXIO).

4) Click on drop down arrow field under the "Stop Bit" field and chose the number of stop bits for the communications protocol of the device which is connected to the GTP-32 (typically "1" for all protocols; Sony, Odet, VDCP, NXIO).

5) Click on drop down arrow field under the "Parity" field and chose the number of stop bits for the communications protocol of the device which is connected to the GTP-32 (typically "ODD" for all protocols; Sony, Odet, VDCP, NXIO).

6) Click on drop down arrow field under the "Char Size" field and chose the number of data bits for the communications protocol of the device which is connected to the GTP-32 (typically "8" for all protocols; Sony, Odet, VDCP, NXIO).

7) Click on drop down arrow field under the "Operation Mode" field and chose the mode of operation for the communications protocol of the device which is connected to the GTP-32 (typically "CONTROLLER" for all protocols; Sony, Odet, VDCP, NXIO).

8) Click on "SAVE" to save the entered values

   OR

   Click on "BACK" to exit without saving entered values.

NOTE: All protocols will default to the normally correct Physical Configuration settings. These should only be modified if the remote device is configured using non-default settings.

Ethernet Physical Configuration

1) Click on the "Protocol Assignment" link at the top of the page. The Protocol Assignment Table will be displayed.
2) Click on "Edit" field under the "PHY Configuration". An edit widow will be displayed.
3) Enter the IP Address of the remote device being connected to.
4) Click on "SAVE" to save the entered values

   OR

   Click on "BACK" to exit without saving entered values.

EVENT NOTIFICATION

The Event Notification web page is used to send event status to a Universal Switch Panel to be used as a tally source.

1) Edit the Event Notification List

a) Click on the Event Notification link near the top of the webpage.

b) Click on the Edit link near the top of the Event Notification table.

c) Under the USP IP Address field, enter the IP address of the USP that the event will be sent to.

d) Under the Community String, enter "public"

e) Under the Event Name pull down menu, select the event that will be sent to the USP.

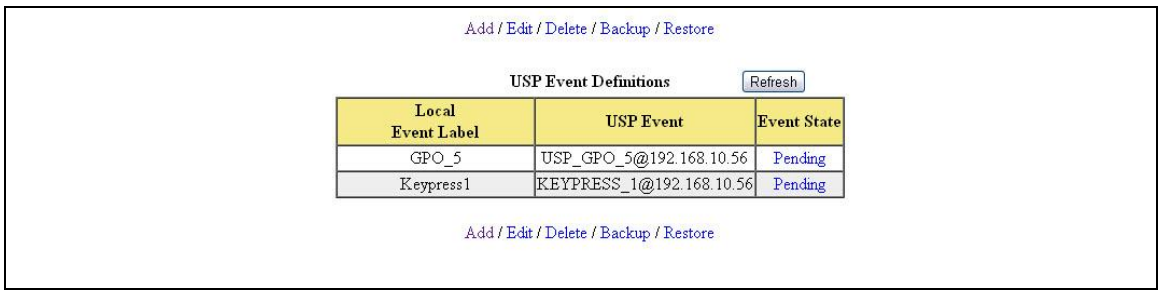
f) Repeat steps c through e for each event to be sent to USPs.

g) Click on the Save button to save the desired changes or click on Cancel to return to the Event Notification web page without saving.

EVENT DEFINITIONS

USP EVENTS

USP Events allow the GTP-32 to monitor keypresses and GPOs from a remote Universal Switch Panel. These events may be used as part of a Combinatorial Event or directly within the Event Monitoring Table.

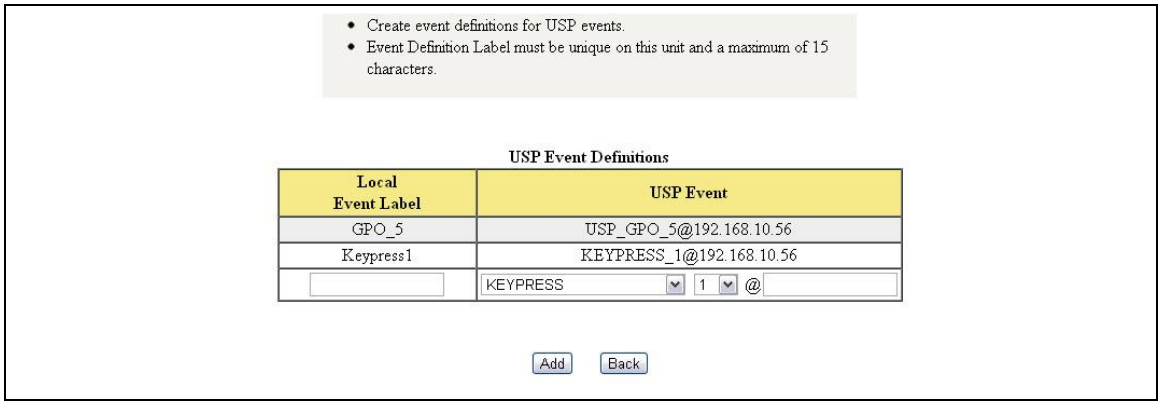


2) Creating USP Events

a) Click on the Event Definitions link near the top of the page.

b) Click on the USP Events link.

c) Click on the Add link near the top of the USP Event Definitions table.



d) In the Local Event Label field, enter a unique label for the USP Event being created. The label may be a maximum of 15 characters.

e) Under the USP Event field, select the type of event being monitored from the USP in the first pull down menu.

a. Keypress – The state of the event will follow the state of the key being monitored. (On when the key is held down, Off when the key is released)

b. Keypress Momentary – When the key is pressed, the event will turn on and then immediately turn off automatically. No Off Functions will be processed for this event.

c. Heartbeat - Deprecated

d. USP_GPO – The state of the event will follow the state of the GPO on the USP that is being monitored. (On when the GPO is on, and Off when the GPO is off.)

f) Under the USP Event field, select the Key or GPO number that is being monitored from the second pull down menu.

g) Under the USP Event field, enter the IP address of the USP that is being monitored in the text box on the far right.

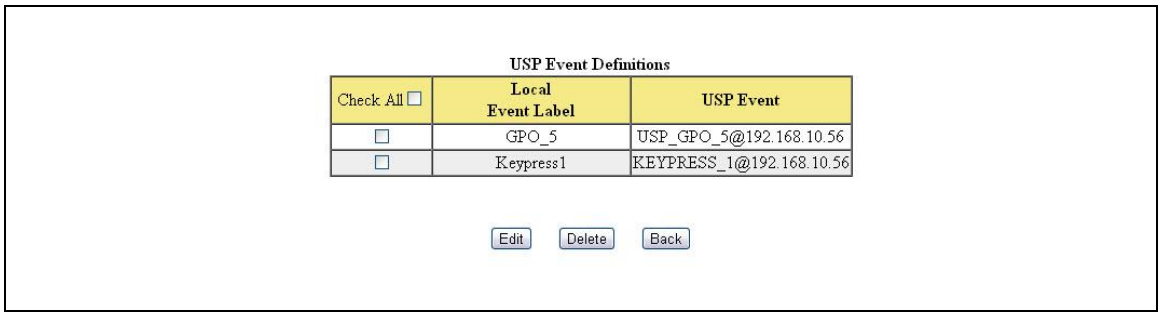
h) Click on the Add button to save the created USP Event, or click on the Back button to return to the USP Events page without saving.

3) Editing USP Events

a) Click on the Event Definitions link near the top of the page.

b) Click on the USP Events link.

c) Click on the Edit link near the top of the USP Event Definitions table.



d) Using the checkboxes to the left hand side, select the USP Events to be edited, then click on the Edit button.

e) Make any desired changes to the selected USP Events. Click on the Save button to save the changes, or click on the Back button to return to the USP Events page without saving the changes.

4) Deleting USP Events

a) Click on the Event Definitions link near the top of the page.

b) Click on the USP Events link.

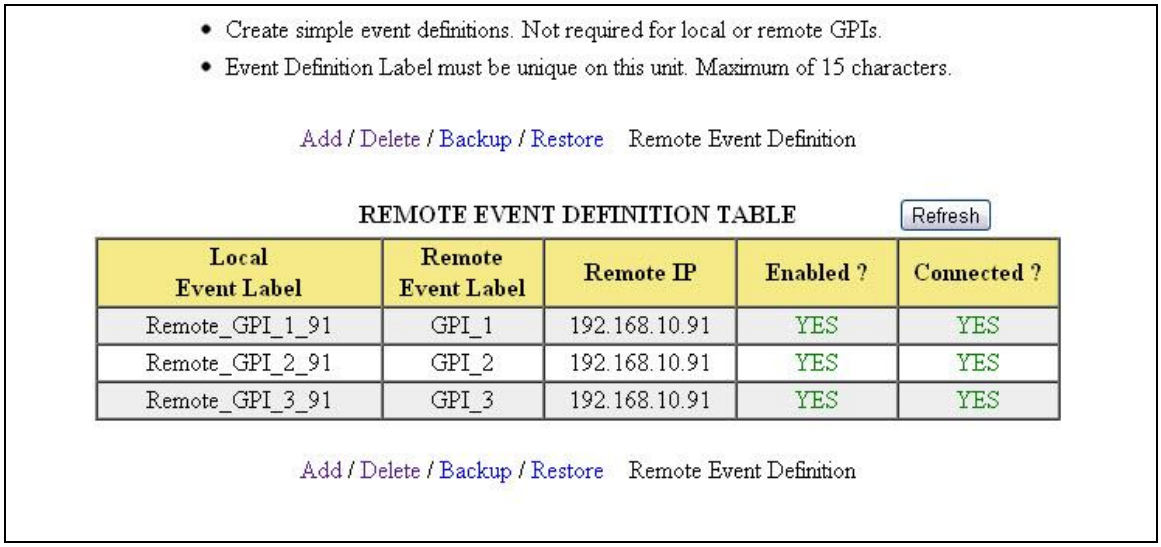
c) Click on the Delete link near the top of the USP Event Definitions table.

d) Using the checkboxes to the left hand side, select the USP Events to be Deleted, then click on the Delete button.

e) A confirmation prompt will be displayed. Press the Delete button to delete the selected events, or press the Back button to return to the USP Events table.

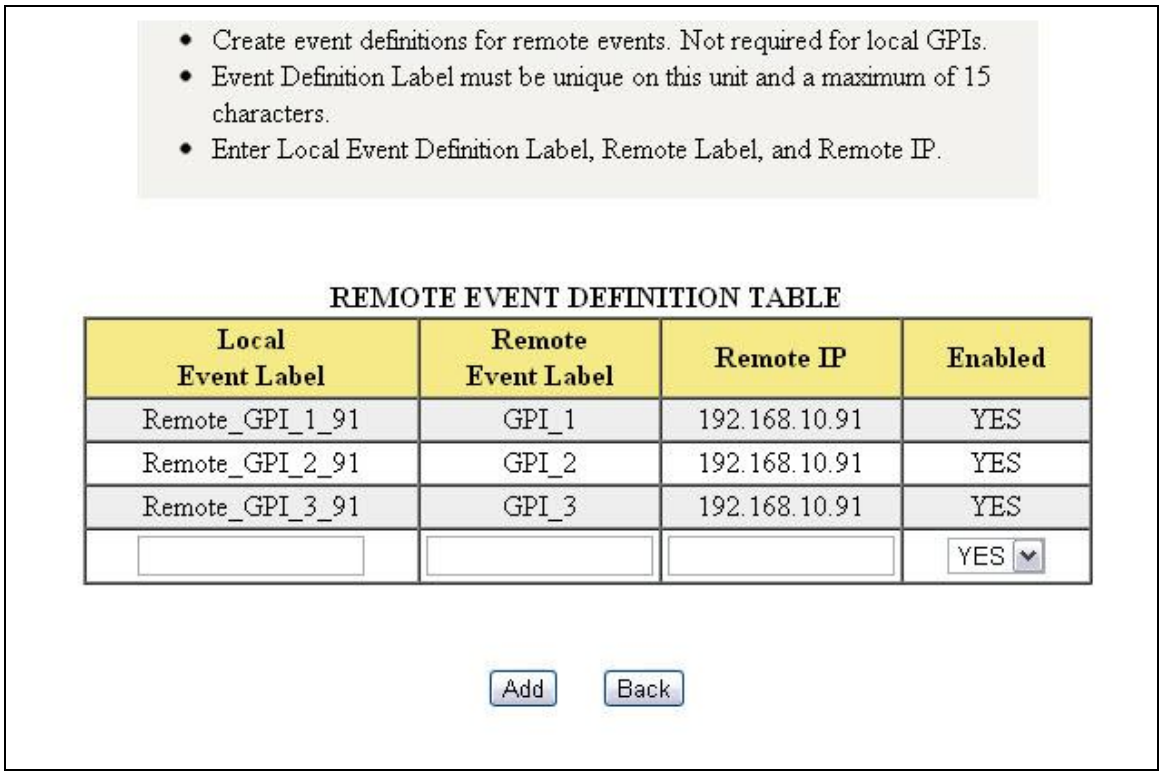
REMOTE EVENT DEFINITIONS

Remote Event Definitions allow the GTP-32 to monitor and trigger from events contained within other GTP-32's. Remote Event Definitions are monitored over the Ethernet connection, and can be used to monitor any event within a GTP-32.


Create simple event definitions. Not required for local or remote GPIs.
Event Definition Label must be unique on this unit. Maximum of 15 characters.
Add / Delete / Backup / Restore Remote Event Definition
REMOTE EVENT DEFINITION TABLE
Refresh
Local Event Label
Remote Event Label
Remote IP
Enabled ?
Connected ?
Remote_GPI_1_91 GPI_1 192.168.10.91 YES YES
Remote_GPI_2_91 GPI_2 192.168.10.91 YES YES
Remote_GPI_3_91 GPI_3 192.168.10.91 YES YES
Add / Delete / Backup / Restore Remote Event Definition

1) Add Remote Event Definitions

1. Click on the Event Definitions link near the top of the page.
2. Click on the Remote Events link.
3. Click on the Add link near the top of the Remote Event Definitions table.


Create event definitions for remote events. Not required for local GPIs.
Event Definition Label must be unique on this unit and a maximum of 15 characters.
Enter Local Event Definition Label, Remote Label, and Remote IP.
REMOTE EVENT DEFINITION TABLE
Local Event Label
Remote Event Label
Remote IP
Enabled
Remote_GPI_1_91 GPI_1 192.168.10.91 YES
Remote_GPI_2_91 GPI_2 192.168.10.91 YES
Remote_GPI_3_91 GPI_3 192.168.10.91 YES
YES
Add
Back

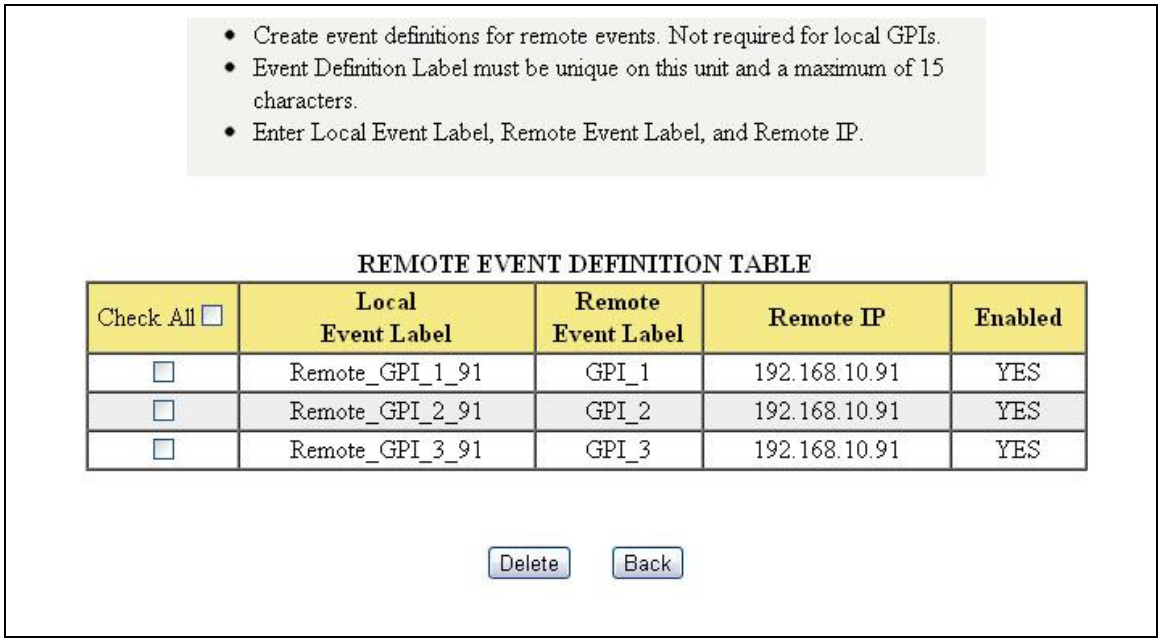
4. In the Local Event Label field, enter a unique label for this event. This label may be a maximum of 15 characters.
5. In the Remote Event Label field, enter the label of the event on the remote GTP-32 that will be monitored.
6. In the Remote IP field, enter the IP address of the GTP-32 that contains the event you wish to monitor.
7. (OPTIONAL) If you wish to disable the functionality of this event, select No from the Enabled pull down menu.
8. Click on the Add button to save the entered information

   OR

   Click on the Back button to return to the Remote Event Definitions table without saving.

2) Deleting Remote Event Definitions

1. Click on the Event Definitions link near the top of the page.
2. Click on the Remote Events link.
3. Click on the Delete link near the top of the Remote Event Definitions table.



4. Using the checkboxes to the left hand side, select the Remote Event Definitions to be Deleted, then click on the Delete button.
5. A confirmation prompt will be displayed. Press the Delete button to delete the selected events, or press the Back button to return to the Remote Event Definitions table.

COMBINATORIAL EVENTS

The Combinatorial Logic Option for the GTP-32 delivers Tally Intelligence. In addition to one Event controlling one Action, the Combinatorial Logic Option allows one Action to be controlled by multiple Events based upon a user-entered definition. Now, diode OR'ing and other "glue logic" circuits are no longer necessary.

The Combinatorial Event Definition screen, available through the GTP-32's web interface is used by the operator to create a combinatorial event definition.

The combinatorial event definition consists of:
Unique user entered name (event identifier)
User entered equation that contains a list of source events to monitor and logical operators (AND, OR, NOT, XOR, NAND, and NOR).
User selected "Available: Yes" or "Available: No" allows the definition to be temporarily disabled.

Combinatorial Event Definitions may be added, deleted, or modified at any time without affecting system operation or requiring a system reboot. Combinatorial Event Definitions may also be nested in other Combinatorial Event Definitions.

After defining Combinatorial Event Definitions, their event identifiers may be used in the Channel Event Monitoring Table as a source to affect local GPOs. Remote GTP-32s may also use these event identifiers in their Channel Event Monitoring Tables to affect GPOs.

The individual components of the Combinatorial Event Definition are monitored on a real-time basis by the GTP-32. When the current states of the components cause the definition to become true, the GPO assigned in the Event Monitoring Table will be controlled by the associated "ON Function". When the current states of the components cause the definition to become false, the assigned GPO will be controlled by the associated "OFF Function".

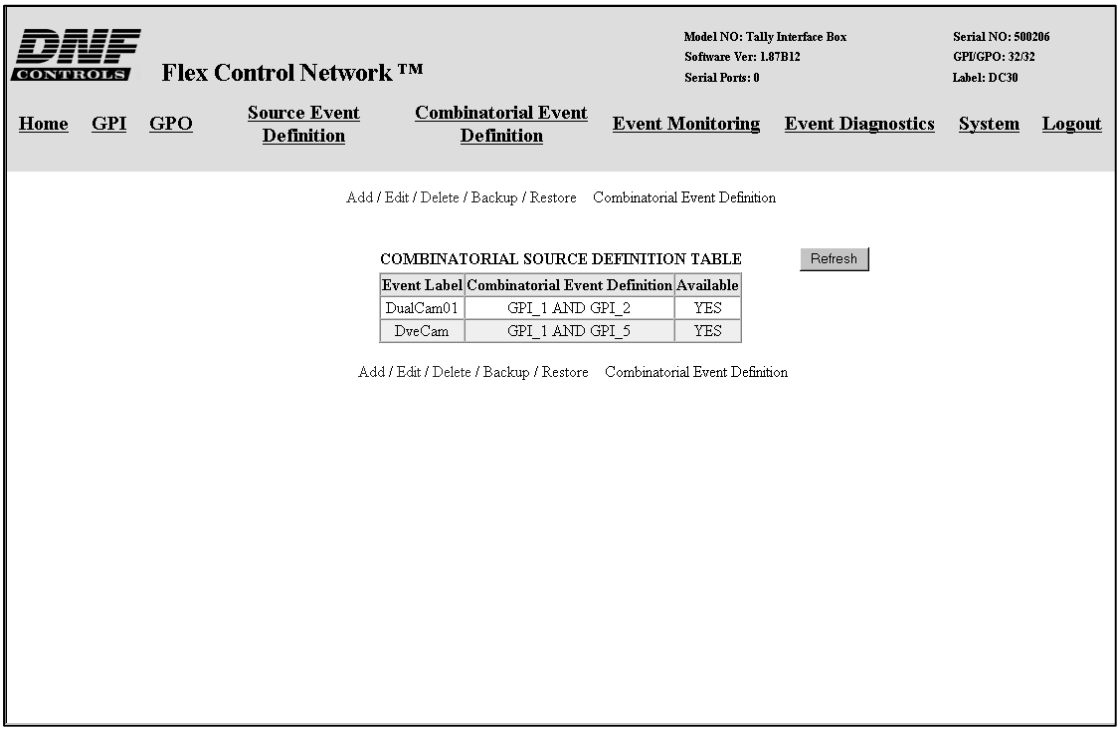
1) Combinatorial Event Setup

To view the Combinatorial Event Definition screen, launch a web browser on the computer connected to the GTP-32 through an ethernet switch.

Using the web browser-
Enter the IP address of the GTP-32. The GTP-32 Home Page will be displayed.

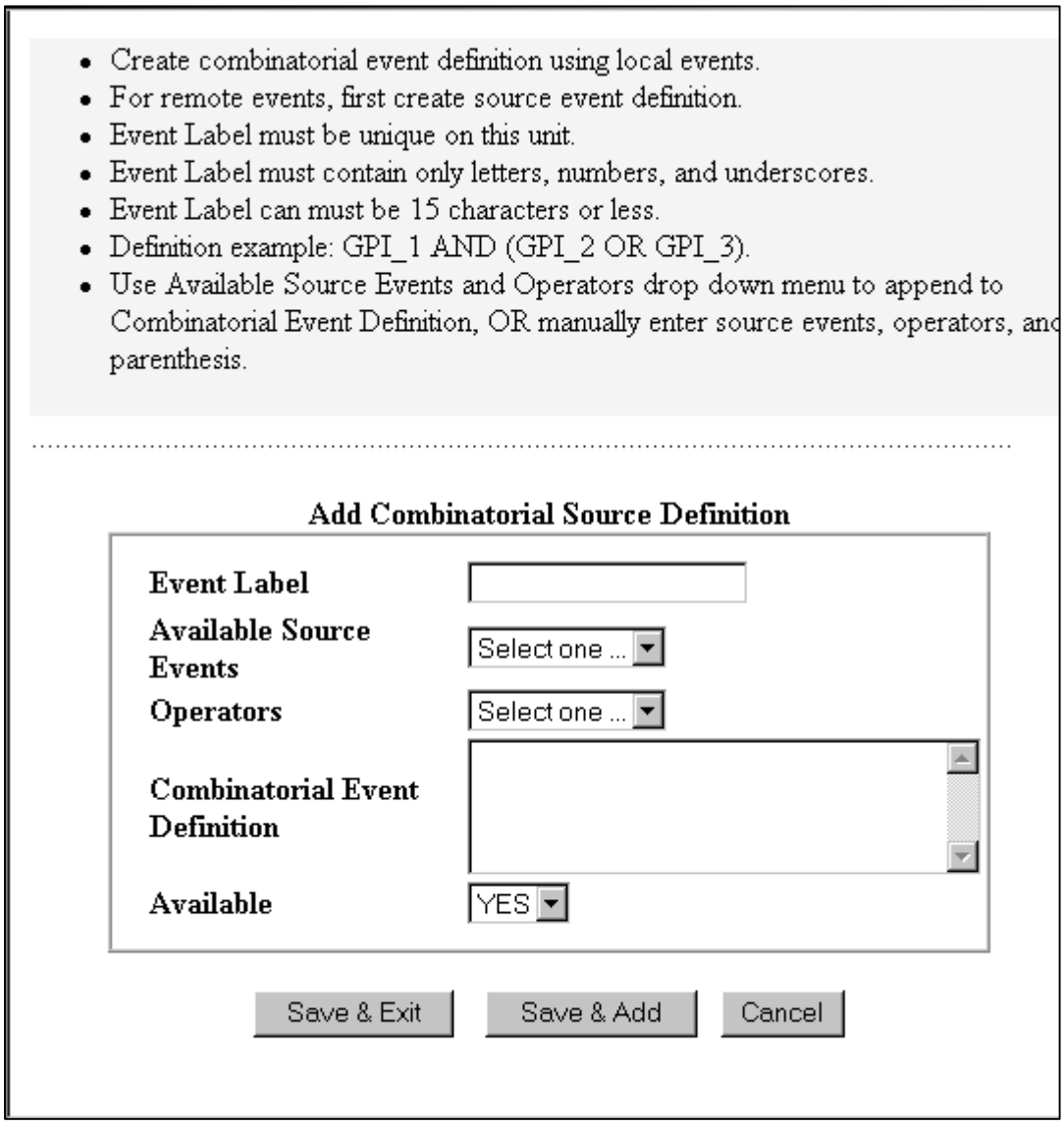
Click on the Event Definitions link at the top of the page.

Click on the Combinatorial Event Definitions link.


DNF CONTROLS
Flex Control Network ™
Model NO: Tally Interface Box
Software Ver: 1.87B12
Serial Ports: 0
Serial NO: 500206
GPI/GPO: 32/32
Label: DC30
Home GPI GPO Source Event Definition Combinatorial Event Definition Event Monitoring Event Diagnostics System Logout
Add / Edit / Delete / Backup / Restore Combinatorial Event Definition
COMBINATORIAL SOURCE DEFINITION TABLE
Refresh
Event Label | Combinatorial Event Definition | Available
DualCam01 | GPI_1 AND GPI_2 | YES
DveCam | GPI_1 AND GPI_5 | YES
Add / Edit / Delete / Backup / Restore Combinatorial Event Definition

2) ADD a Combinatorial Event Definition

1) Click on the Add link near the top of the table. The entry screen will be displayed in a pop-up window.


Create combinatorial event definition using local events.
For remote events, first create source event definition.
Event Label must be unique on this unit.
Event Label must contain only letters, numbers, and underscores.
Event Label can must be 15 characters or less.
Definition example: GPI_1 AND (GPI_2 OR GPI_3).
Use Available Source Events and Operators drop down menu to append to Combinatorial Event Definition, OR manually enter source events, operators, and parenthesis.
Add Combinatorial Source Definition
Event Label
Available Source Events
Select one ...
Operators
Select one ...
Combinatorial Event Definition
Available
YES
Save & Exit
Save & Add
Cancel

2) In the Event Label box, enter a unique Label of up to 15 alpha-numeric characters. This label must be unique on the GTP-32 that it is created on. This unique label will be used by the local Event Monitor Table and remote Event Monitor Tables to access this definition.

3) The second box shows the list of ñAvailable Eventsò that may be used in the combinatorial event definition. Manually enter an source event followed by a logic operator followed by another source event.

4) Select ñYESò in the ñAvailableò column to allow this definition to be used. Select ñNOò to temporarily disable this definition.

5) Click on ñSave and Exitò to save the entered combinatorial event definition and Exit, or click on ñSave and Addò to continue to enter additional events, or click on ñCancelò to exit without saving.

Note: "Available" for the event definition will be set to Disabled if an source event entered in step 4 above does not exist or has been misspelled. To correct, select edit to re-enter the source event name(s).

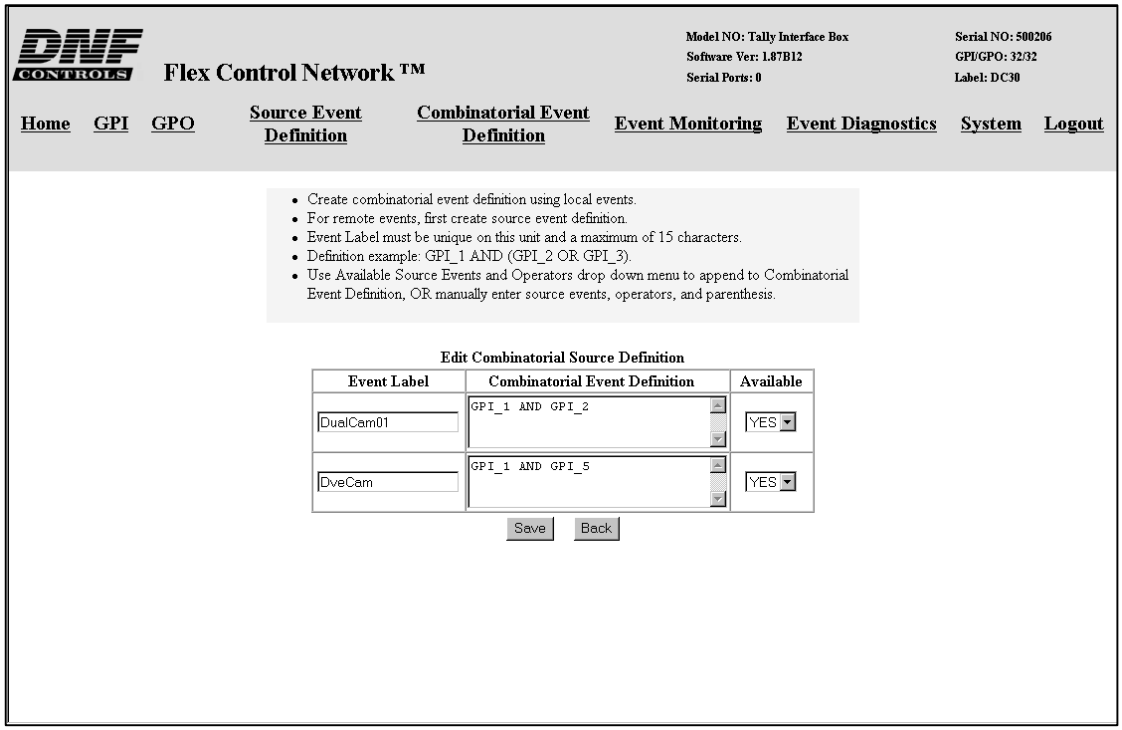
The individual components of the entered combinatorial definition are monitored on a real-time basis by the Event Monitor Table. When the current states of the components cause the definition to become true, the GPO assigned in the Event Monitoring Table will be controlled by the "ON Function". When the current states of the components cause the definition to become false, the assigned GPO will be controlled by the "OFF Function".

3) EDIT a Combinatorial Event Definition

1) Click on the Edit link near the top of the table. The selection screen will be displayed.

2) Click the "All" box to edit all combinatorial event definitions OR click on the desired event definition to edit.
3) Click on ñEditò to edit the selected items, or click on "Back" to return to the previous screen.

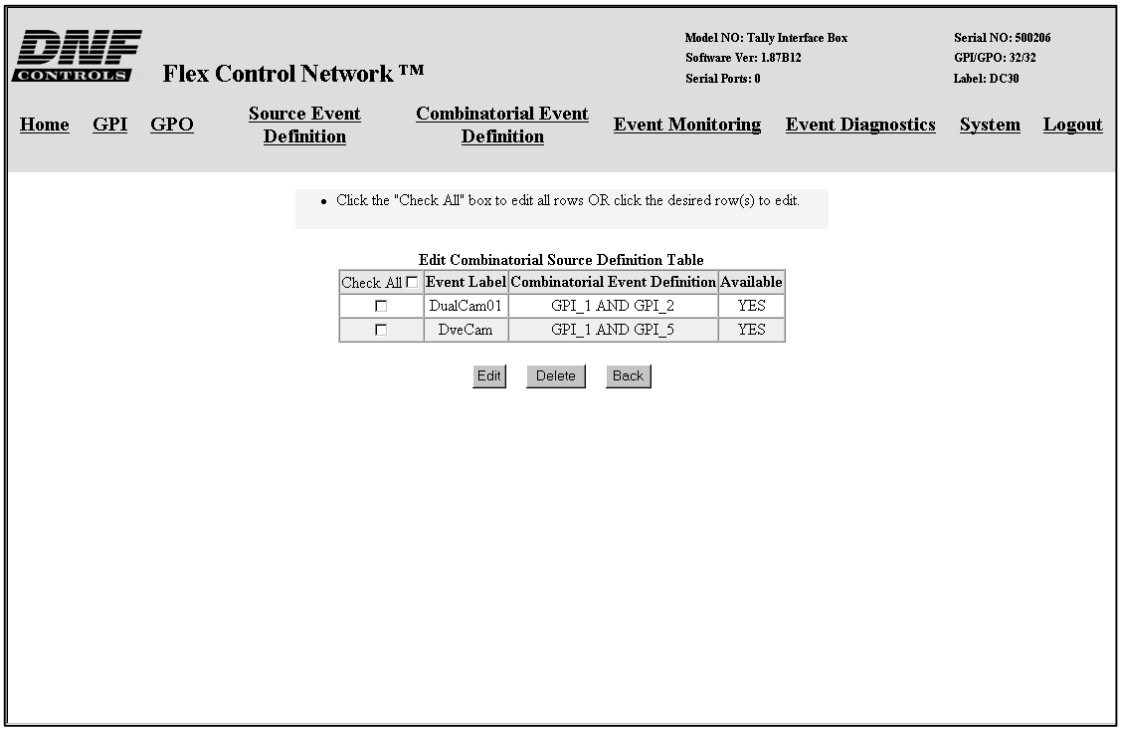
4) For each row selected, make the desired changes using the pull down menus.


DNF CONTROLS
Flex Control Network ™
Model NO: Tally Interface Box
Software Ver: 1.87B12
Serial Ports: 0
Serial NO: 500206
GPI/GPO: 32/32
Label: DC30
Home GPI GPO Source Event Definition Combinatorial Event Definition Event Monitoring Event Diagnostics System Logout
Create combinatorial event definition using local events.
For remote events, first create source event definition.
Event Label must be unique on this unit and a maximum of 15 characters.
Definition example: GPI_1 AND (GPI_2 OR GPI_3).
Use Available Source Events and Operators drop down menu to append to Combinatorial Event Definition, OR manually enter source events, operators, and parenthesis.
Edit Combinatorial Source Definition
Event Label
Combinatorial Event Definition
Available
DualCam01
GPI_1 AND GPI_2
YES
DveCam
GPI_1 AND GPI_5
YES
Save
Back

5) Click on ñSaveò to save the edited items, or click on ñBackò to return to the previous screen without saving the changes.

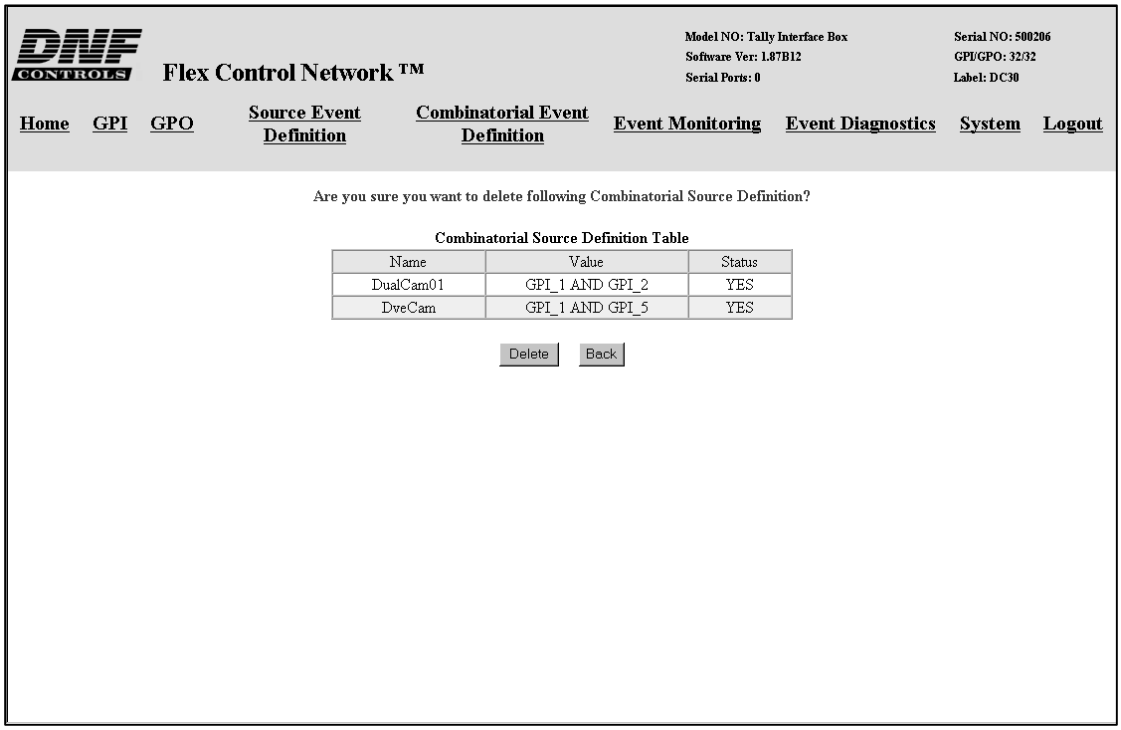
4) DELETE a Combinatorial Event Definition

1) Click on the Delete link near the top of the table. The definition selection page will be displayed.



2) Click the "Check All" box to delete all definitions OR click the desired definition(s) to delete.

3) Click on ñDELETEò at the bottom of the table.


DNF CONTROLS
Flex Control Network ™
Model NO: Tally Interface Box
Software Ver: 1.87B12
Serial Ports: 0
Serial NO: 500206
GPI/GPO: 32/32
Label: DC30
Home GPI GPO Source Event Definition Combinatorial Event Definition Event Monitoring Event Diagnostics System Logout
Are you sure you want to delete following Combinatorial Source Definition?
Combinatorial Source Definition Table
Name Value Status
DualCam01 GPI_1 AND GPI_2 YES
DveCam GPI_1 AND GPI_5 YES
Delete
Back

4) A confirmation prompt will be displayed. Click on ñDELETEò at the bottom of the page to delete the selected rows, or click on ñBACKò to return to the previous page without deleting.

ACTION DEFINITIONS

TIME ACTIONS

Time Delay Action gives the user the ability to delay the turn on and/or turn off of a GPO by up to 24 hours. The user can assign a delay or no delay to each GPO. Additionally, the user can assign a unique delay time for each delay. The delayed turn on, or turn off, can be cancelled at any time before the delay expires. Time Delay supports NTSC (DF and NDF) as well as PAL and 24P. A GTP web page displays the current state and countdown of all delayed actions.

The Time Delay Action requires a connection from the GTP to the facility's LTC time source. Combinatorial Logic option is included with the Time Delay Action software.

To configure Time Delay Actions:

Using a standard web browser (Internet Explorer, Firefox, or other), from the GTP's home page—

1) Configure LTC Mode

1) Click on the Action Definitions link near the top of the page.
2) Click on the Time Actions link.
3) Click on the pull-down menu for Saved Delay Time Mode. The default setting is NTSC.
4) Select the desired LTC mode from the pull-down menu. DF/NDF is detected automatically when NTSC is selected.
5) Click on Save Mode to save the current selection.

2) Creating Time Delay Actions

1) Click on the Action Definitions link near the top of the page.
2) Click on the Time Actions link.
3) Click on the Add link just below the header.
4) Under the Add Delay Action Definitions section, enter a Delay Action Label. Each time delay action must have a unique name within the unit. This label can be no longer than 15 characters.
5) Enter an amount of time to delay the action by. Times must be entered using the format "HH:MM:SS:FF." If the time is not entered in this format or is entered using invalid characters, the time delay action will not be saved and an error message will be returned.
6) Select a desired action from the Predefined System Action pull-down menu. The actions available include GPO ON, GPO OFF, TOGGLE GPO, and any available Switcher or Router control actions.
7) Click on Save Delay Action. If successful, a message will be displayed under Result of Last Operation confirming its success. If

not, an error message will be displayed and the delay action will not be saved.

3) Creating Time Delay Cancel Actions

1) Click on the Action Definitions link near the top of the page.
2) Click on the Time Actions link.
3) Click on the Add link just below the header.
4) Under the Add Cancel Action Definitions section, enter a Cancel Action Label. Each time delay action must have a unique name within the unit. This label can be no longer than 15 characters.
5) Select a previously created time delay action from the Predefined Time Delays pull-down menu.
6) Click on Save Cancel Action. If successful, a message will be displayed under Result of Last Operation confirming its success. If not, an error message will be displayed and the cancel action will not be saved.

4) Edit Time Delay/Cancel Actions

1) Click on the Action Definitions link near the top of the page.
2) Click on the Time Actions link.
3) Click on the Edit link just below the header.
4) Click on the Edit Delay Actions button to edit time delay actions, or click on the Edit Cancel Actions button to edit cancel actions.
5) Select which actions to edit using the checkboxes next to each action
6) Click on Edit Selected Delay/Cancel Actions.
7) Make any necessary changes as desired. Click on Commit Delay/Cancel Actions to save the changes and return to the root Time Actions page.

5) Delete Time Delay/Cancel Actions

1) Click on the Action Definitions link near the top of the page.
2) Click on the Time Actions link.
3) Click on the Delete link just below the header.
4) Select which actions to edit using the checkboxes next to each action
5) Click on Delete Selection.
6) A confirmation page will be displayed containing the selected actions. Press Confirm to delete the actions, or Cancel to return to the root Time Actions page without deleting the actions.

6) Display Current Delay Status

1) Click on the Action Definitions link near the top of the page.
2) Click on the Time Actions link.
3) Click on the Display Status link just above the Time Delay Action Definitions table. The table displayed will contain information regarding each active delay action. Completed/Cancelled actions will be continue to be displayed for 10 seconds, and then removed from the table.
4) Click on the Refresh link to update the current display.
5) Click on the Abort link to cancel a delayed action, or click on the Execute link to execute a delayed action immediately.

GROUP ACTIONS

Group Actions allow multiple channels to be affected by the same action simultaneously without requiring multiple entries in the Event Monitoring Table. Channels may be added to or removed from the group at will without requiring a reboot. A set of predefined Group Actions for changing a channels Group Assignment are automatically created within the GTP. User-defined Group Actions can be created to affect the channels within that group.

Predefined Group Actions

Action Label	**Function**
GM_CHX_Grp_Tgle	Increment the current Group number for the selected channel
GM_CHX_Grp_Off	Set the Group number to zero for the selected channel
GM_CHX_GrpY_On	Set the Group number to the selected number for the selected channel
GM_GrpY_Clr	Set the Group number to zero for all channels currently in the selected Group.

1) Configure Group Ranges for Channels
    1) Click on the Protocol Assignment link near the top of the page.
    2) Click on the Edit Protocol Assignment Table link above the Protocol Assignment Table.
    3) Using the drop down menus provided, select the range of available Groups for each channel.
    4) Click on the Save button to save the changes made, or click on the Back button to return to the Protocol Assignment Table without saving.

2) Create User-Defined Group Actions

1) Click on the Action Definitions link near the top of the page.
2) Click on the Group Actions link.
3) Click on the Add link above the Group Actions table.
4) Under Label, enter a unique action label for the action being created. "GR_" is automatically added to the beginning of the event label.
5) Under the Predefined Action pull down menu, select the Action you wish to execute on all members of the Group.
6) Under the Group pull down menu, select the Group number that this action will be applied to.
7) Click on the Save button to save the entered information, or click the Cancel button to return to the Group Actions page without saving.

3) Editing User-Defined Group Actions
    1) Click on the Action Definitions link near the top of the page.
    2) Click on the Group Actions link.
    3) Click on the Edit link above the Group Actions table.
    4) Make any desired changes to the Group Actions table.
    5) Click on the Save button to save the entered changes, or Click on the Cancel button to return to the Group Actions table without saving.

4) Deleting User-Defined Group Actions
    1) Click on the Action Definitions link near the top of the page.
    2) Click on the Group Actions link.
    3) Click on the Delete link above the Group Actions table.
    4) Using the check boxes on the left hand side, select the Group Actions to be deleted.
    5) Click on the Delete Selected button to delete the selected events, or click on the Delete All button to delete all Group Actions.
    6) A confirmation prompt will be displayed. Click on the Confirm button to delete the selected events, or click on the Cancel button to return to the Group Actions table without deleting.

EVENT MONITORING

The Event Monitor Table, the power of the GTP-32, routes Events to Actions. The GTP-32 monitors local and remote Events to execute various actions. "Local Events" are GPIs that are located inside the GTP-32. "Remote Events" are Events located in another GTP-32, on the same local area network.

The GTP-32 monitors the current state of an Event. When the Event turns "ON", the associated Action assigned in the "ON FUNCTION" is executed. When the Event turns "OFF", the associated Action assigned in the "OFF FUNCTION" is executed.

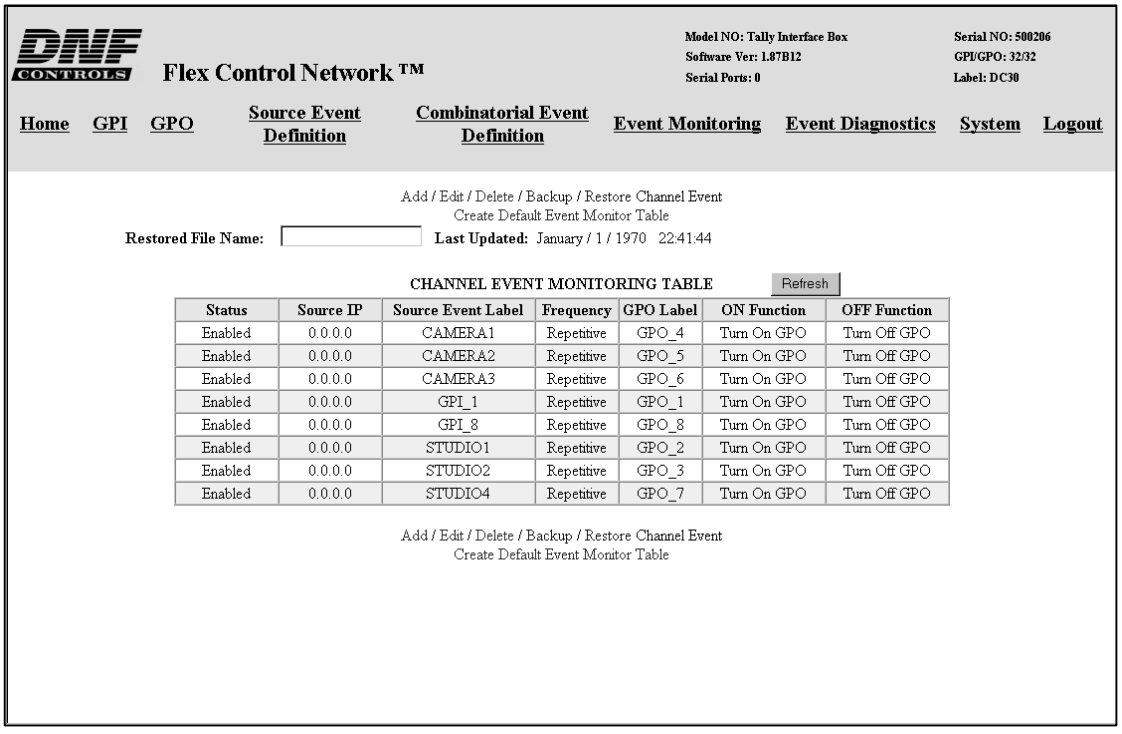
In the Event Monitoring Table, a single Event may be routed to control a single Action. A single Event may be routed to control many Actions. Also, many Events may be routed to control a single Action.

The Event Monitoring Table uses combining logic to support the "One to Many" and "Many to One" relationships. If three (3) Events (i.e. GPIs) are routed to control the same Action, (i.e.: a GPO), the GPO will turn on if ANY one of the three GPIs is turned on. The GPO will only turn off when ALL three GPIs are turned off.

Each row in the Event Monitoring Table is used to route one Event to one Action. To use one Event to control many Actions, add a row for each Action to be controlled. To use many Events to control one Action, add one row for each Event.

Launch Web Browser

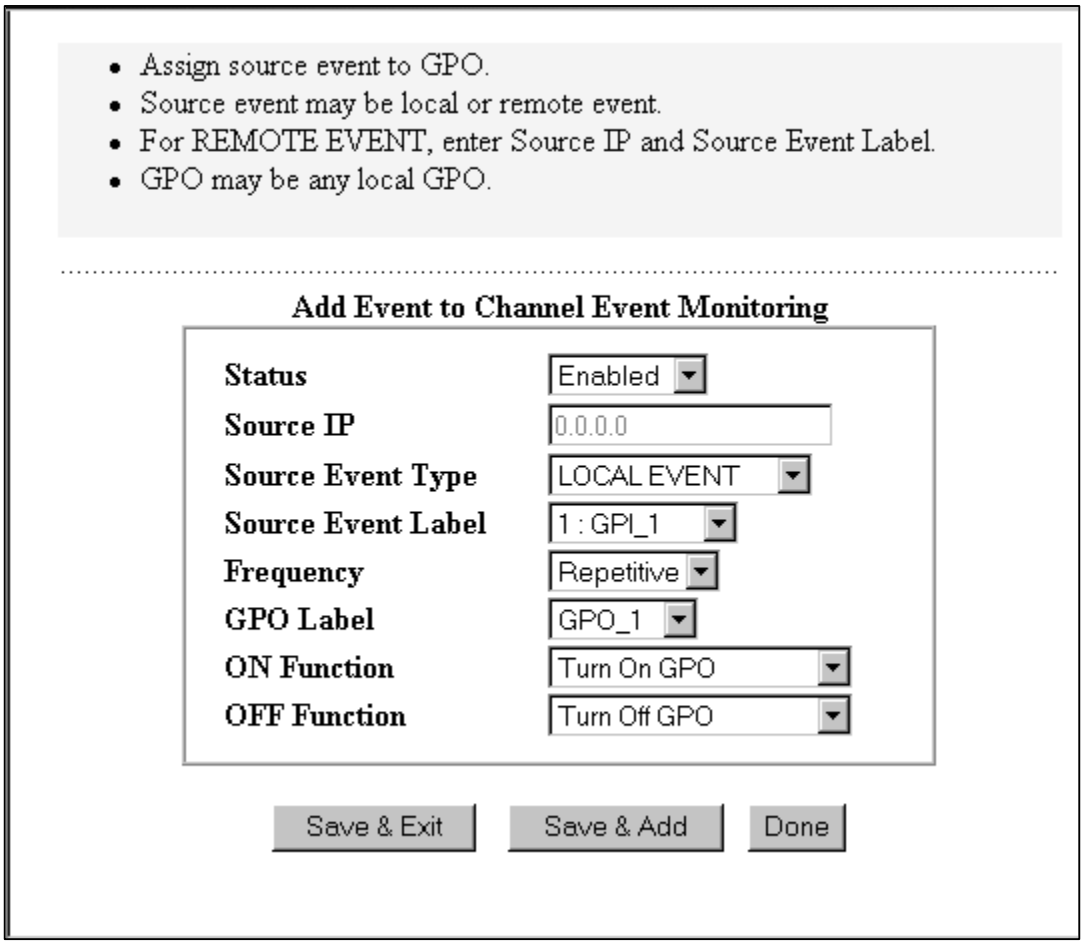
1) Launch the web browser on the computer connected through an ethernet switch to the GTP-32.
2) Enter the IP address of the GTP-32 to be setup. The GTP-32 Home Page will be displayed.
3) Click on the "Event Monitoring" link. The Event Monitor Table page will be displayed.


DNF CONTROLS
Flex Control Network ™
Model NO: Tally Interface Box
Software Ver: 1.87B12
Serial Ports: 0
Serial NO: 500206
GPI/GPO: 32/32
Label: DC30
Home GPI GPO Source Event Definition Combinatorial Event Definition Event Monitoring Event Diagnostics System Logout
Add / Edit / Delete / Backup / Restore Channel Event
Create Default Event Monitor Table
Restored File Name:
Last Updated: January / 1 / 1970 22:41:44
CHANNEL EVENT MONITORING TABLE
Refresh
Status | Source IP | Source Event Label | Frequency | GPO Label | ON Function | OFF Function
Enabled | 0.0.0.0 | CAMERA1 | Repetitive | GPO_4 | Turn On GPO | Turn Off GPO
Enabled | 0.0.0.0 | CAMERA2 | Repetitive | GPO_5 | Turn On GPO | Turn Off GPO
Enabled | 0.0.0.0 | CAMERA3 | Repetitive | GPO_6 | Turn On GPO | Turn Off GPO
Enabled | 0.0.0.0 | GPI_1 | Repetitive | GPO_1 | Turn On GPO | Turn Off GPO
Enabled | 0.0.0.0 | GPI_8 | Repetitive | GPO_8 | Turn On GPO | Turn Off GPO
Enabled | 0.0.0.0 | STUDIO1 | Repetitive | GPO_2 | Turn On GPO | Turn Off GPO
Enabled | 0.0.0.0 | STUDIO2 | Repetitive | GPO_3 | Turn On GPO | Turn Off GPO
Enabled | 0.0.0.0 | STUDIO4 | Repetitive | GPO_7 | Turn On GPO | Turn Off GPO
Add / Edit / Delete / Backup / Restore Channel Event
Create Default Event Monitor Table

ADD A ROW TO THE EVENT MONITORING TABLE

1) Click on the "Event Monitoring" link at the top of the page. The Event Monitor Table will be displayed.

2) Click on the Add link near the top of the table. The entry screen will be displayed.



3) Select Status "Enabled" from the drop down menu.

4) Select Source event type, "Local" or "Remote".

5) If Remote was selected for the Source Event Type, enter the Source IP address of the Remote GTP-32 to monitor.

6) Select a Source Event Label. This is the source that will be monitored. For example, to monitor a GPI, enter "GPI_1".

7) Select "Repetitive" from the FREQUENCY drop down menu.

8) Select the Destination GPO number from the drop down menu. This is the GPO that will be controlled by the GPI or event entered in step 5) above.

9) Select the "ON FUNCTION". This is the function that will execute each time the Source Event turns on.

10) Select the "OFF FUNCTION". This is the function that will execute each time the Source Event turns off. If the function is controlled by more than one Source Event, all Source Events must turn off before the OFF FUNCTION will execute.

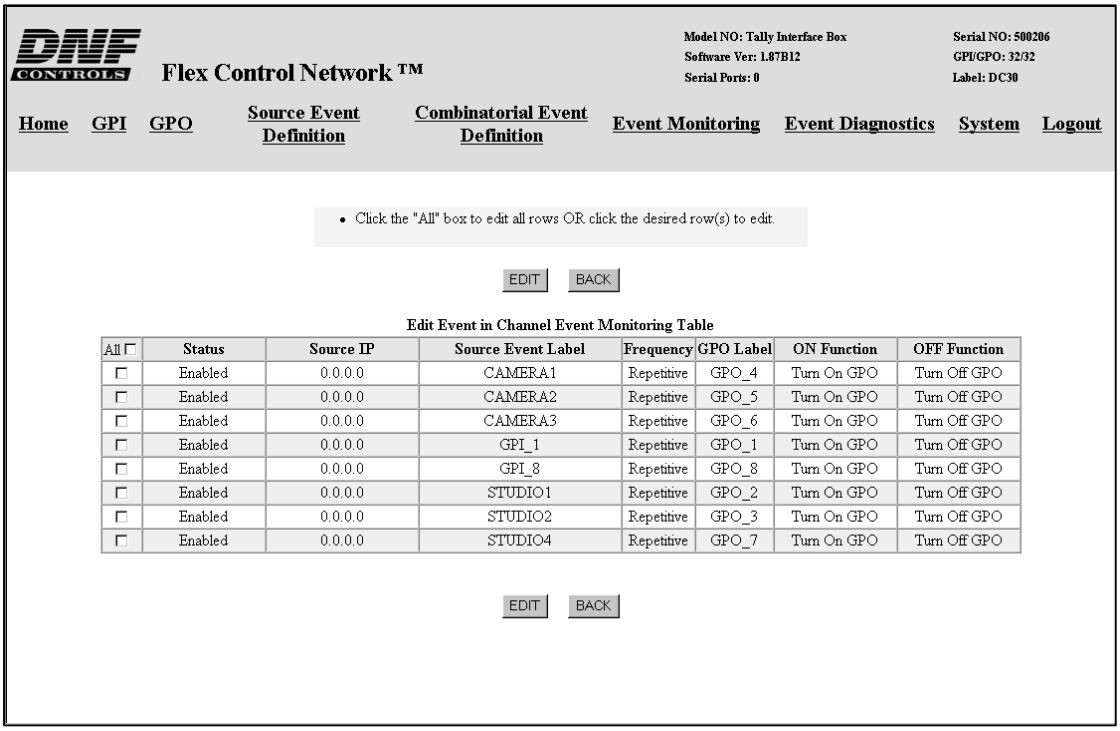
11) Click on SAVE and EXIT to save the entry and exit to the previous page.

12) Click on SAVE and Add to save the entry and continue to add events, or click on DONE to exit without saving.

Note: Duplicate events are not permitted in the table. If an added row is a duplicate of an existing row, the new row will not be added to the table.

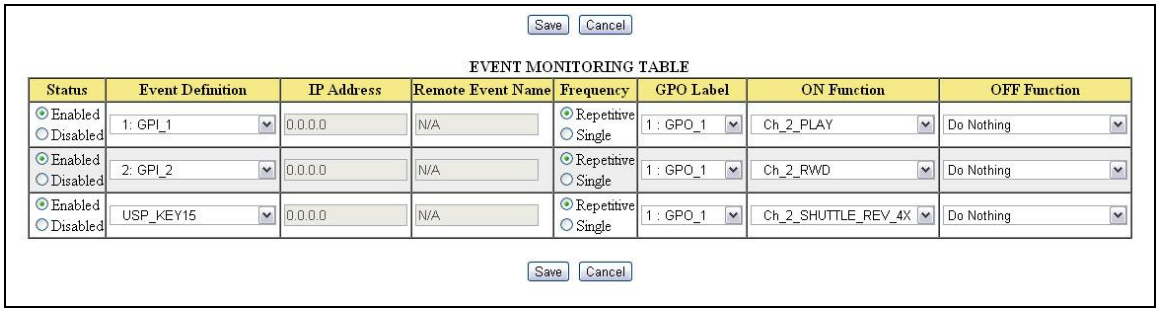
EDIT A ROW IN THE EVENT MONITORING TABLE

1) Click on the "Event Monitoring" link at the top of the page. The Event Monitor Table will be displayed.
2) Click on the Edit link near the top of the table. The row selection page will be displayed.
3) Using the check boxes on the left hand side, check the desired rows to be edited, or check the All box to select all rows.


DNF CONTROLS
Flex Control Network ™
Model NO: Tally Interface Box
Software Ver: 1.87B12
Serial Ports: 0
Serial NO: 500206
GPI/GPO: 32/32
Label: DC30
Home GPI GPO Source Event Definition Combinatorial Event Definition Event Monitoring Event Diagnostics System Logout
• Click the "All" box to edit all rows OR click the desired row(s) to edit.
EDIT BACK
Edit Event in Channel Event Monitoring Table
All
Status
Source IP
Source Event Label
Frequency
GPO Label
ON Function
OFF Function
Enabled 0.0.0.0 CAMERA1 Repetitive GPO_4 Turn On GPO Turn Off GPO
Enabled 0.0.0.0 CAMERA2 Repetitive GPO_5 Turn On GPO Turn Off GPO
Enabled 0.0.0.0 CAMERA3 Repetitive GPO_6 Turn On GPO Turn Off GPO
Enabled 0.0.0.0 GPI_1 Repetitive GPO_1 Turn On GPO Turn Off GPO
Enabled 0.0.0.0 GPI_8 Repetitive GPO_8 Turn On GPO Turn Off GPO
Enabled 0.0.0.0 STUDIO1 Repetitive GPO_2 Turn On GPO Turn Off GPO
Enabled 0.0.0.0 STUDIO2 Repetitive GPO_3 Turn On GPO Turn Off GPO
Enabled 0.0.0.0 STUDIO4 Repetitive GPO_7 Turn On GPO Turn Off GPO
EDIT BACK

4) Click on "EDIT" at the top or bottom of the table, or click on "BACK" to return to the previous page.

5) For each selected row, make the desired changes using the displayed pull down menus.



6) Once all changes have been made, click on the Save button to save the changes, or click on Cancel to exit without saving.

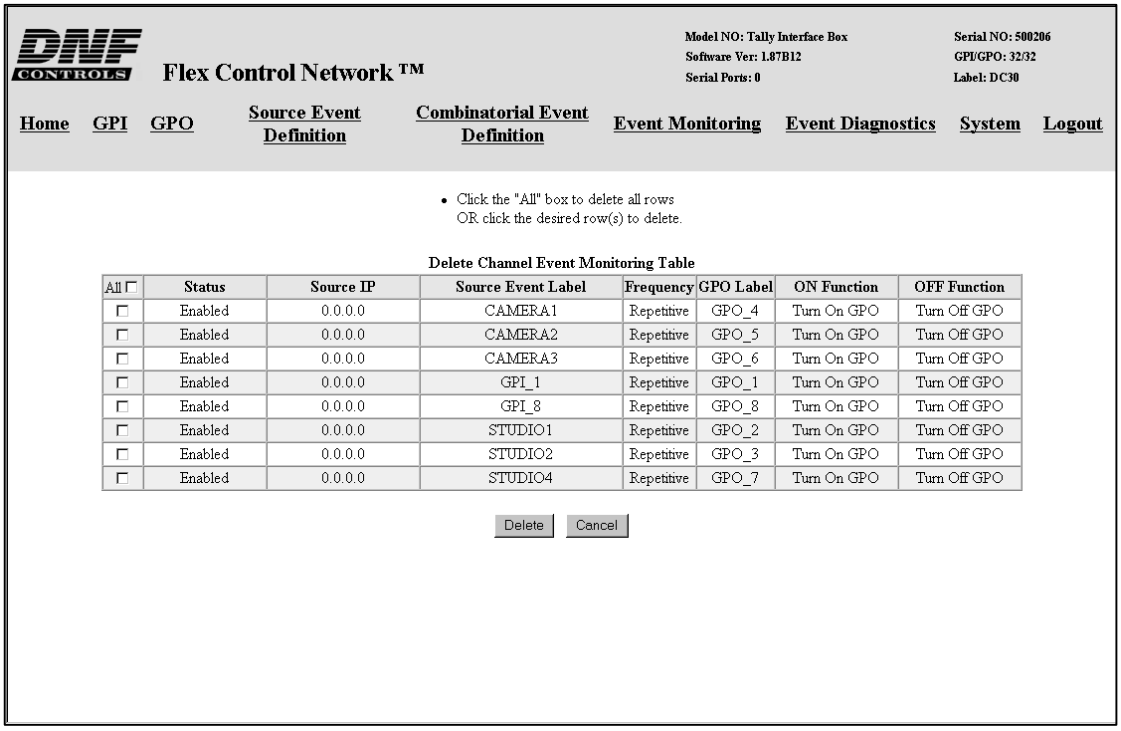
Note: Duplicate events are not permitted in the table. If an edited row is a duplicate of an existing row, the edited row will be restored with its original data.

DELETE A ROW IN THE EVENT MONITORING TABLE

1) Using the web browser:

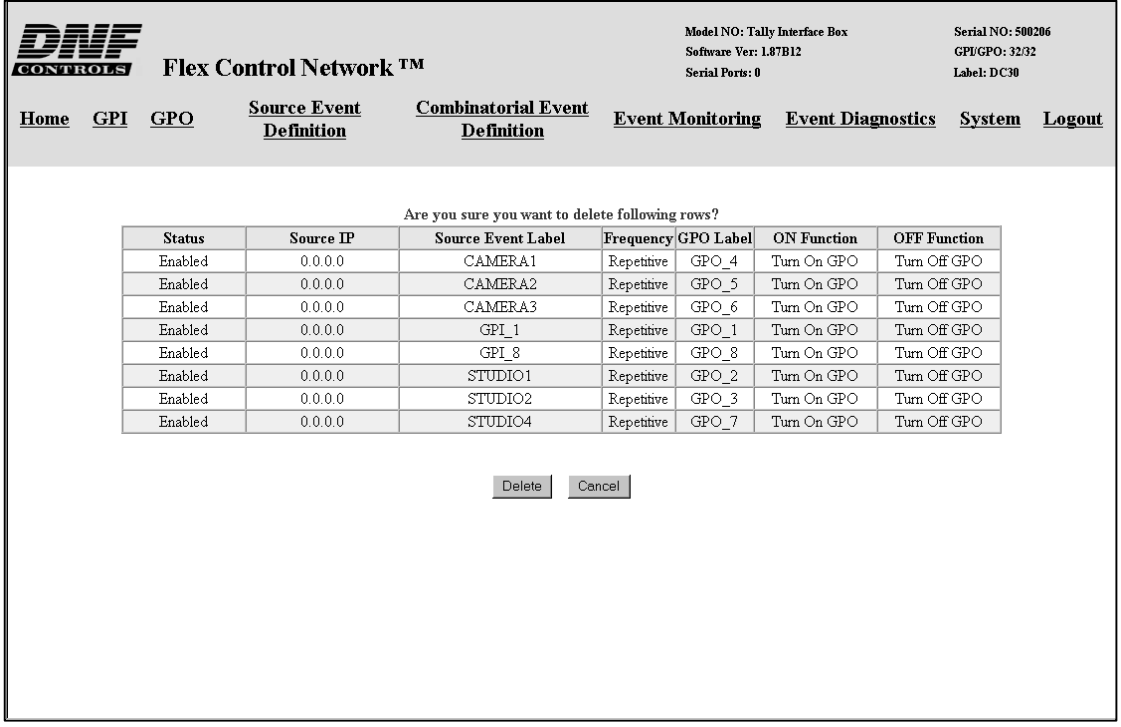
2) Click on the "Event Monitoring" link at the top of the page. The Event Monitor Table will be displayed.

3) Click on "Delete … Channel Event". The row selection page will be displayed.


DNF CONTROLS
Flex Control Network ™
Model NO: Tally Interface Box
Software Ver: 1.87B12
Serial Ports: 0
Serial NO: 500206
GPI/GPO: 32/32
Label: DC30
Home GPI GPO Source Event Definition Combinatorial Event Definition Event Monitoring Event Diagnostics System Logout
Click the "All" box to delete all rows
OR click the desired row(s) to delete.
Delete Channel Event Monitoring Table
All
Status
Source IP
Source Event Label
Frequency
GPO Label
ON Function
OFF Function
Enabled 0.0.0.0 CAMERA1 Repetitive GPO_4 Turn On GPO Turn Off GPO
Enabled 0.0.0.0 CAMERA2 Repetitive GPO_5 Turn On GPO Turn Off GPO
Enabled 0.0.0.0 CAMERA3 Repetitive GPO_6 Turn On GPO Turn Off GPO
Enabled 0.0.0.0 GPI_1 Repetitive GPO_1 Turn On GPO Turn Off GPO
Enabled 0.0.0.0 GPI_8 Repetitive GPO_8 Turn On GPO Turn Off GPO
Enabled 0.0.0.0 STUDIO1 Repetitive GPO_2 Turn On GPO Turn Off GPO
Enabled 0.0.0.0 STUDIO2 Repetitive GPO_3 Turn On GPO Turn Off GPO
Enabled 0.0.0.0 STUDIO4 Repetitive GPO_7 Turn On GPO Turn Off GPO
Delete
Cancel

4) Using the check boxes on the left hand side, check the desired rows to be deleted, or check the All box to select all rows.

5) Click on "DELETE" at the bottom of the table.


Flex Control Network ™
Model NO: Tally Interface Box
Software Ver: 1.87B12
Serial Ports: 0
Serial NO: 500206
GPI/GPO: 32/32
Label: DC30
Home GPI GPO Source Event Definition Combinatorial Event Definition Event Monitoring Event Diagnostics System Logout
Are you sure you want to delete following rows?
Status | Source IP | Source Event Label | Frequency | GPO Label | ON Function | OFF Function
Enabled | 0.0.0.0 | CAMERA1 | Repetitive | GPO_4 | Turn On GPO | Turn Off GPO
Enabled | 0.0.0.0 | CAMERA2 | Repetitive | GPO_5 | Turn On GPO | Turn Off GPO
Enabled | 0.0.0.0 | CAMERA3 | Repetitive | GPO_6 | Turn On GPO | Turn Off GPO
Enabled | 0.0.0.0 | GPI_1 | Repetitive | GPO_1 | Turn On GPO | Turn Off GPO
Enabled | 0.0.0.0 | GPI_8 | Repetitive | GPO_8 | Turn On GPO | Turn Off GPO
Enabled | 0.0.0.0 | STUDIO1 | Repetitive | GPO_2 | Turn On GPO | Turn Off GPO
Enabled | 0.0.0.0 | STUDIO2 | Repetitive | GPO_3 | Turn On GPO | Turn Off GPO
Enabled | 0.0.0.0 | STUDIO4 | Repetitive | GPO_7 | Turn On GPO | Turn Off GPO
Delete
Cancel

6) A confirmation page will be displayed. Click on "DELETE" at the bottom of the page to delete the selected rows, or click on "CANCEL" to return to the previous page without deleting.

BACKUP AND RESTORE TABLES

The GTP-32 includes the ability to backup and restore the various each of the various configuration tables within its web pages. These files may be saved to a PC, as well as uploaded from a PC. These files may be uploaded either to the same unit or a different one for quick configuration.

Restoring a configuration from a Backup File will delete all current entries within the table being restored and replace them with the entries contained within the Backup File.

1) Create a Backup File
   a. On the web page for the desired configuration table, click on the Backup link near the top of the table.
   b. In the "Enter File Name" field, enter a file name for the backup file being created. The file name may be up to 32 characters in length. The file extension will automatically be appended to the end of the file name. Each backup file must have a unique name.
   c. Click on the Save button to create the new backup file, or click on the Done button to return to the previous web page without creating the new backup file.

2) Delete a Backup File

   a. On the web page for the desired configuration table, click on the Backup link near the top of the table.

   b. Using the radio buttons next to the various Backup Files, select the file to be deleted.

   c. Click on the Delete Saved File button.

   d. A confirmation prompt will be displayed before deleting the file. Click on the Delete button to delete the selected file, or click on the Cancel button to return to the previous webpage without deleting the selected file.

3) Save a Backup File to a PC

   a. On the web page for the desired configuration table, click on the Backup link near the top of the table.

   b. Right click on the desired Backup File. Select the Save Link As… option.

   c. Select a directory to save the file in and Click Save, or click Cancel to close the Save As window without saving.

4) Load a Backup File from a PC

   a. On the webpage for the desired configuration table, click on the Restore link near the top of the table.

   b. Click on the Choose File button.

   c. Navigate to the directory where the desired Backup File is stored, select the desired file, and Click Open.

   d. Click on the Upload to GTP button. NOTE: The file upload may take a few seconds. Do not refresh the webpage while the upload is occurring. Once complete, the webpage will refresh automatically.

5) Restore a Backup File

   a. On the webpage for the desired configuration table, click on the Restore link near the top of the table.

   b. Using the radio buttons next to the various Backup Files, select the file to be restored.

   c. Click on the Load button.

   d. A confirmation prompt will be displayed. Click on the Load button to load the selected configuration, or click cancel to return to the previous web page without restoring the configuration.

EVENT LOGGING

EVENT LOGGING allows the GTP-32 to log Events, Actions, and diagnostic information into a log file on the GTP. For each Event / Action, the Event / Action label, current state, and the system date and time will be saved into the log file. If the LTC time code option is installed, the "House System Time" will also be saved.

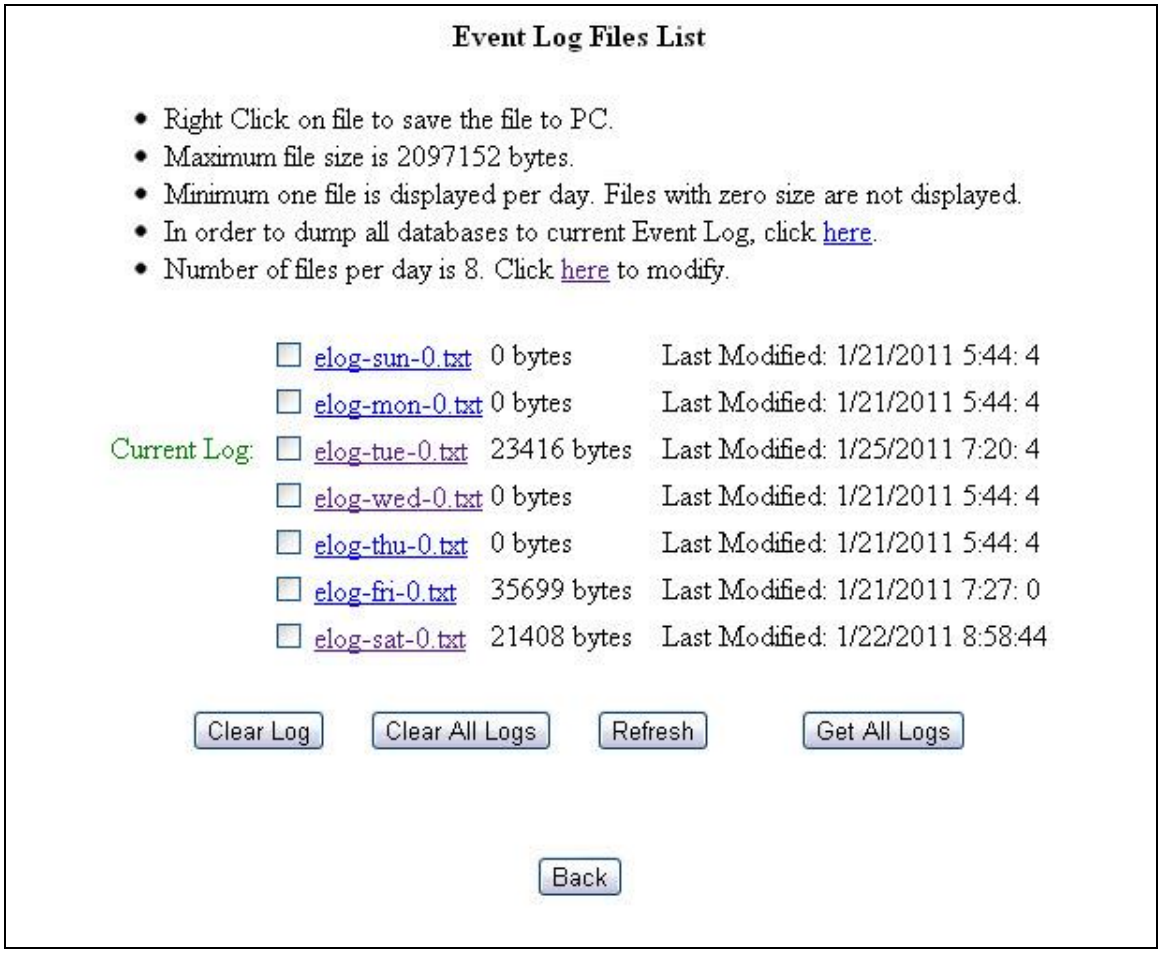
The GTP-32 will maintain log files for 7 days. At midnight, based upon the GTP's internal clock, the logging will continue in the next day's file. On the 8th day, the oldest log file will be deleted and replaced with a new empty file.

The GTP-32 will hold anywhere from 4 – 12 log files per day. The first log file for each day is named "elog-xxx-0.txt" where "xxx" is the day of the week. When a log files reaches the maximum number of events, it will create another log file for that day using the same naming scheme, and increment the number at the end of the file name by 1. (elog-xxx-1.txt, elog-xxx-2.txt, etc.) If the number of logged events for a day exceeds this maximum number, the oldest log file for that day will be overwritten with the new events.

The data in the log file will be in a standard text document, (.txt file). This file can be uploaded to a PC and viewed with any text editing program or word processor. It can also be imported into a spreadsheet or database program for viewing or statistical analysis. There is no user intervention necessary to start the logging feature, it is always active.

VIEW AND SAVE LOG FILES

1) Click on the System link near the top of the page.
2) Click on the System Maintenance link.
3) Click on the View Event Logs link.


Event Log Files List
Right Click on file to save the file to PC.
Maximum file size is 2097152 bytes.
Minimum one file is displayed per day. Files with zero size are not displayed.
In order to dump all databases to current Event Log, click here.
Number of files per day is 8. Click here to modify.
elog-sun-0.txt 0 bytes Last Modified: 1/21/2011 5:44: 4
elog-mon-0.txt 0 bytes Last Modified: 1/21/2011 5:44: 4
Current Log:
elog-tue-0.txt 23416 bytes Last Modified: 1/25/2011 7:20: 4
elog-wed-0.txt 0 bytes Last Modified: 1/21/2011 5:44: 4
elog-thu-0.txt 0 bytes Last Modified: 1/21/2011 5:44: 4
elog-fri-0.txt 35699 bytes Last Modified: 1/21/2011 7:27: 0
elog-sat-0.txt 21408 bytes Last Modified: 1/22/2011 8:58:44
Clear Log
Clear All Logs
Refresh
Get All Logs
Back

4) The Current Log tag notes which log file is currently in use and contains the most recent log messages.
5) To view a log, click on the link for that log file. The selected file will be opened within the browser.
6) To save a log to your PC, right click on the link for that log file and select "Save Link As…"

DELETE LOG FILES

1) Click on the System link near the top of the page.
2) Click on the System Maintenance link.
3) Click on the View Event Logs link.
4) Using the checkboxes to the left hand side, select the Event Logs to be Deleted, then click on the Clear Log button, or click on the Clear All Logs button to delete all logs currently on the GTP-32.
5) A confirmation prompt will be displayed. Press Confirm to delete the selected logs, or click on the Back button to return to the Remote Event Definitions table.

CHANGE MAXIMUM NUMBER OF LOG FILES PER DAY

1) Click on the System link near the top of the page.
2) Click on the System Maintenance link.
3) Click on the View Event Logs link.
4) The fifth bullet point displays the current number of available log files per day.
5) To modify this setting, click on the link to the right of the current number of available log files per day.
6) In the text field, enter how many log files per day are desired. The minimum amount of log files per day is 4. The maximum amount of log files per day is 12.
7) Click the Set button to save the entered changes.

NOTE: This setting change does not take effect until the unit is rebooted.

SPECIFICATIONS

Power: 100 VAC - 240 VAC power supply, Phihong PSAA60M, supplied with IEC connector

Size: 1RU: 1 3/4 inch x 19 inch x 8 1/2 inch (H.W.D.)

Weight: 7 lbs

Front Panel Display: 2 line x 16 character

Front Panel Keyboard: 8 keys with LEDs

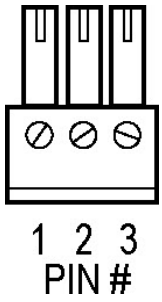
E – Net #1: RJ45 Connector

E – Net #2: RJ45 Connector
Not Used

LTC Input: 3-pin Phoenix Connector

Pin-out for Balanced LTC:
- Pin 1 = LTC HI
- Pin 2 = LTC LOW
- Pin 3 = Common/Shield

Pin-out for Unbalanced LTC:
- Pin 1 = LTC HI
- Pin 2 = Tie to Pin 3
- Pin 3 = Shield



REF Video: BNC Connector, Female
Not Used

Power Connector: 2-Pin Male (CPC Connector)

Pin #	Function
1	Not Connected
2	+15-28V
3	Ground
4	Not Connected

Diagnostic Port: 9-Pin Female (D9F)

Pin #	Function	Pin #	Function
1	DCD	6	DSR
2	Rxd	7	RTS
3	Txd	8	CTS
4	DTR	9	RI
5	Ground		

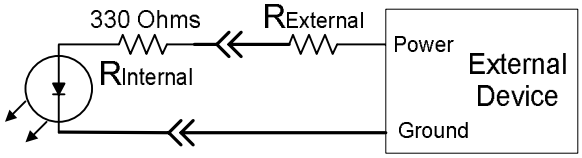
Serial Port 1, 2, 3, 4: 9-Pin Female (D9F)

Pin #	Function	Pin #	Function
1	Frame Ground	6	Transmit Common
2	Receive A (-)	7	Receive B (+)
3	Transmit B (+)	8	Transmit A (-)
4	Receive Common	9	Frame Ground
5	Spare		

GPIO CONNECTORS: GPI 1 – 16, GPI 17 – 32, GPO 1 – 16, GPO 17 - 32; 4 x 37-Pin Female (D37F)

GPI: Opto Isolated Input. GPI source must provide power to turn on opto-isolator.

GPI Opto-isolator Input:
5V - 12 V input voltage
24V use external resistor = 680 - 820 ohm
20ma MAXIMUM CURRENT



Specification for GPI input:

1. Voltage: (Internal resistor only)
   +3.3V minimum
   +5V typical
   +6V maximum
2. Current: (Internal resistor only)
   5mA minimum
   10mA typical
   15mA maximum

For typical 10mA current, if external voltage is higher than +5V, a series resistor is required:

$R_{ext} = (V_{ext} - 4.5) / 0.01$

$V_{ext} = +9V \Rightarrow R_{ext} = 450$ Ohms

$V_{ext} = +12V \Rightarrow R_{ext} = 750$ Ohms

$V_{ext} = +24V \Rightarrow R_{ext} = 1950$ Ohms

GPO: Relay Contact Closure Output. "Dry" contact closure.

GPO Relay Contacts:
0.5 A @ 125VAC
1.0 A @ 24VDC
1.0 A MAXIMUM CURRENT

A. GPI Connector

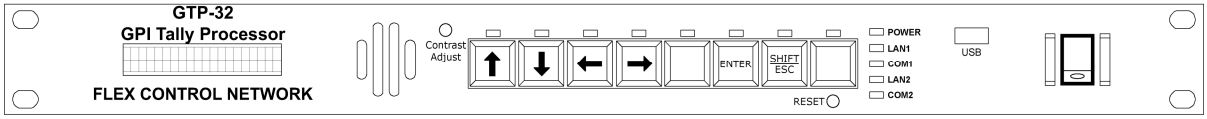
Pin #	Function	Pin #	Function
1	Ground	20	Ground
2	GPI #1 Anode (+)	21	GPI #1 Cathode (-)
3	GPI #2 Anode (+)	22	GPI #2 Cathode (-)
4	GPI #3 Anode (+)	23	GPI #3 Cathode (-)
5	GPI #4 Anode (+)	24	GPI #4 Cathode (-)
6	GPI #5 Anode (+)	25	GPI #5 Cathode (-)
7	GPI #6 Anode (+)	26	GPI #6 Cathode (-)
8	GPI #7 Anode (+)	27	GPI #7 Cathode (-)
9	GPI #8 Anode (+)	28	GPI #8 Cathode (-)
10	Ground	29	Ground
11	GPI #9 Anode (+)	30	GPI #9 Cathode (-)
12	GPI #10 Anode (+)	31	GPI #10 Cathode (-)
13	GPI #11 Anode (+)	32	GPI #11 Cathode (-)
14	GPI #12 Anode (+)	33	GPI #12 Cathode (-)
15	GPI #13 Anode (+)	34	GPI #13 Cathode (-)
16	GPI #14 Anode (+)	35	GPI #14 Cathode (-)
17	GPI #15 Anode (+)	36	GPI #15 Cathode (-)
18	GPI #16 Anode (+)	37	GPI #16 Cathode (-)
19	Ground		

B. GPO Connector

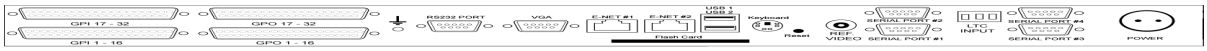
Pin #	Function	Pin #	Function
1	Common Bus	20	Ground
2	GPO #1 Relay Common	21	GPO #1 N.O.
3	GPO #2 Relay Common	22	GPO #2 N.O.
4	GPO #3 Relay Common	23	GPO #3 N.O.
5	GPO #4 Relay Common	24	GPO #4 N.O.
6	GPO #5 Relay Common	25	GPO #5 N.O.
7	GPO #6 Relay Common	26	GPO #6 N.O.
8	GPO #7 Relay Common	27	GPO #7 N.O.
9	GPO #8 Relay Common	28	GPO #8 N.O.
10	Common Bus	29	Ground
11	GPO #9 Relay Common	30	GPO #9 N.O.
12	GPO #10 Relay Common	31	GPO #10 N.O.
13	GPO #11 Relay Common	32	GPO #11 N.O.
14	GPO #12 Relay Common	33	GPO #12 N.O.
15	GPO #13 Relay Common	34	GPO #13 N.O.
16	GPO #14 Relay Common	35	GPO #14 N.O.
17	GPO #15 Relay Common	36	GPO #15 N.O.
18	GPO #16 Relay Common	37	GPO #16 N.O.
19	Common Bus		

FRONT & REAR VIEWS

Front View



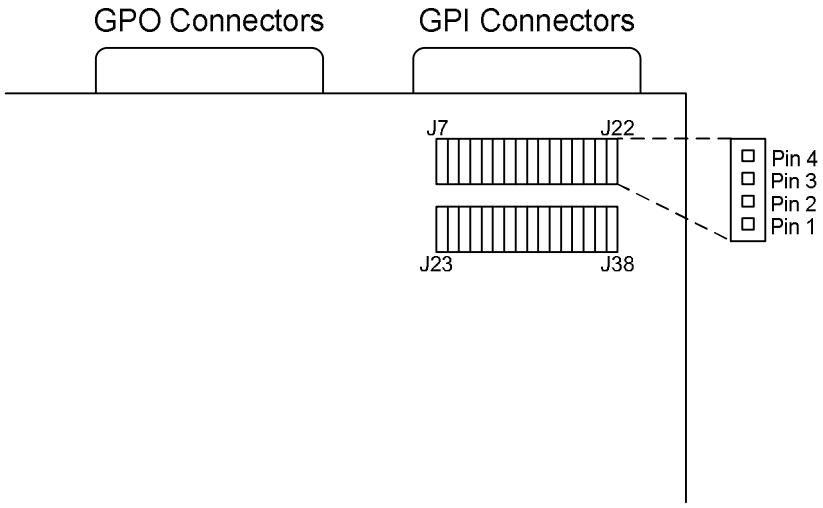
Rear View



CONFIGURE GPIS FOR DRY/WET OPERATION

GPIs are set to Dry operation by default. The GPIs may be set for Wet mode using either a GTP-32 Breakout Panel or using jumpers within the GTP-32. To configure the jumpers inside the GTP-32:

1) Power down the GTP-32.
2) Using a Phillips screwdriver, remove the top cover from the GTP-32. To do so, you will need to remove 3 screws from each side of the unit, 2 from the rear, and 1 from the center of the front of the unit.
3) The GPIO card is on the far right hand side of the unit (if facing the front panel), behind the GPIO connectors.
4) The jumpers for the GPIs are directly behind the GPI connectors, labeled J7 through J38. Each set of jumpers for a GPI consists of 4 pins. See the table below for which GPI corresponds to which jumpers.



5) For Dry operation, set one jumper across pins 2 and 3. Hang the second jumper off of pin 1.
6) For Wet operation, set one jumper across pin 1 and 2. Set the second jumper across pins 3 and 4.
7) Once all necessary changes to the jumpers have been made, replace the top cover and screws on the GTP-32.

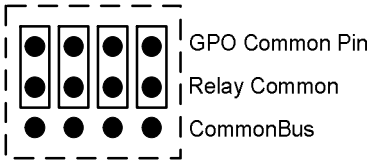
GPI	Jumper
1	J7
2	J8
3	J9
4	J10
5	J11
6	J12
7	J13
8	J14
9	J15
10	J16
11	J17
12	J18
13	J19
14	J20
15	J21
16	J22
17	J23
18	J24
19	J25
20	J26
21	J27
22	J28
23	J29
24	J30
25	J31
26	J32
27	J33
28	J34
29	J35
30	J36
31	J37
32	J38

CONFIGURE GPOS FOR DRY/WET OPERATION

Note: Signal connected to Common Bus is isolated from GTP/DC electronics & power supply.

NOTE:
GPO Jumpers located inside GTP-32

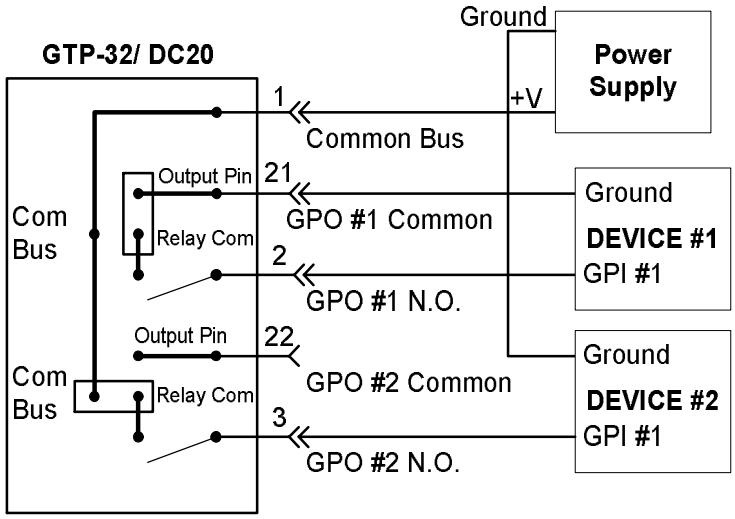
Factory Default configuration shown



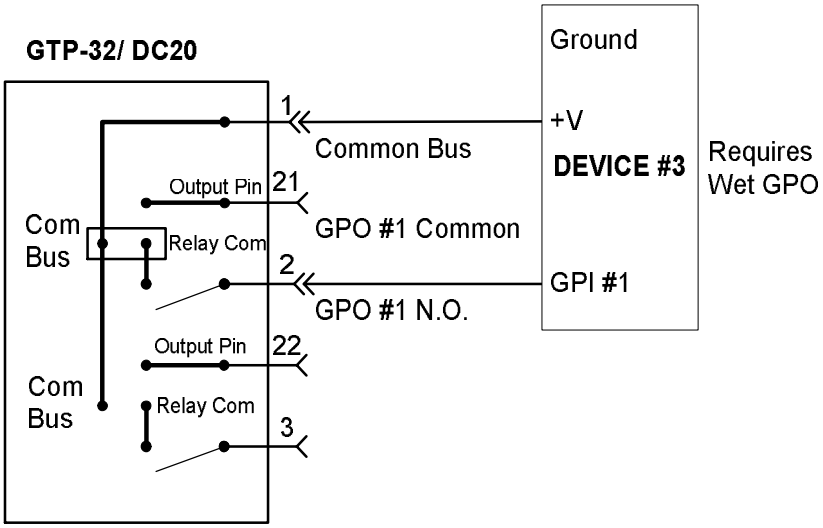
(Viewed from front of unit)

JUMPER	GPO
J40	1
J41	2
J42	3
J43	4
J44	5
J45	6
J46	7
J47	8
J48	9
J49	10
J50	11
J51	12
J52	13
J53	14
J54	15
J55	16
J56	17
J57	18
J58	19
J59	20
J60	21
J61	22
J62	23
J63	24
J64	25
J65	26
J66	27
J67	28
J68	29
J69	30
J70	31
J71	32

EXAMPLE #1- External Power Supply to wet GPOs



EXAMPLE #2- Device supplied power to wet GPOs



LIMITED WARRANTY

DNF Controls warrants its product to be free from defects in material and workmanship for a period of one (1) year from the date of sale to the original purchaser from DNF Controls.

In order to enforce the rights under this warranty, the customer must first contact DNFs Customer Support Department to afford the opportunity of identifying and fixing the problem without sending the unit in for repair. If DNF's Customer Support Department cannot fix the problem, the customer will be issued a Returned Merchandise Authorization number (RMA). The customer will then ship the defective product prepaid to DNF Controls with the RMA number clearly indicated on the customer's shipping document. The merchandise is to be shipped to:

DNF Controls
12843 Foothill Blvd., Suite C
Sylmar, CA 91342
USA

Failure to obtain a proper RMA number prior to returning the product may result in the return not being accepted, or in a charge for the required repair.

DNF Controls, at its option, will repair or replace the defective unit. DNF Controls will return the unit prepaid to the customer. The method of shipment is at the discretion of DNF Controls, principally UPS Ground for shipments within the United States of America. Shipments to international customers will be sent via air. Should a customer require the product to be returned in a more expeditious manner, the return shipment will be billed to their freight account.

This warranty will be considered null and void if accident, misuse, abuse, improper line voltage, fire, water, lightning or other acts of God damaged the product. All repair parts are to be supplied by DNF Controls, either directly or through its authorized dealer network. Similarly, any repair work not performed by either DNF Controls or its authorized dealer may void the warranty.

After the warranty period has expired, DNF Controls offers repair services. Equipment is evaluated and repair price quoted prior to any work performed. DNF Controls reserves the right to refuse repair of any unit outside the warranty period that is deemed non-repairable.

DNF Controls shall not be liable for direct, indirect, incidental, consequential or other types of damage resulting from the use of the product.